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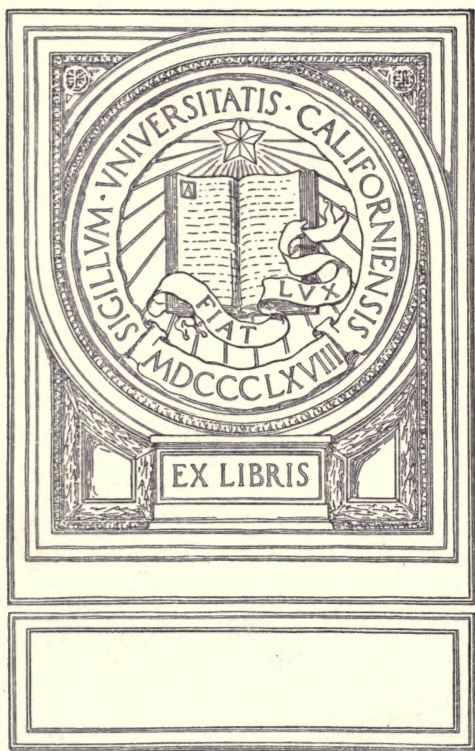


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Johnston L. De Peyster

1857. Remondel del.



56TH CONGRESS, }
1st Session. }

SENATE.

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No. 221.

REPORT

OF THE

COMMISSION APPOINTED BY THE PRESIDENT TO INVESTIGATE THE CONDUCT OF THE WAR DEPARTMENT IN THE WAR WITH SPAIN.

MEMBERS OF THE COMMISSION.

Gen. GRENVILLE M. DODGE, Iowa, *President*.
Col. JAMES A. SEXTON, Illinois.
Col. CHARLES DENBY, Indiana.
Capt. EVAN P. HOWELL, Georgia.
Ex-Governor URBAN A. WOODBURY, Vermont.
Brig. Gen. JOHN M. WILSON, Chief of Engineers,
U. S. A.

Gen. JAMES A. BEAVER, Pennsylvania.
Maj. Gen. ALEXANDER McD. MCCOOK, U. S. A.
Dr. PHINEAS S. CONNER, Ohio.
RICHARD WEIGHTMAN, *Secretary*.
Lient. Col. F. B. JONES, Chief Quartermaster of
Volunteers, *Disbursing Officer*.
Maj. STEPHEN C. MILLS, *Recorder*.

IN EIGHT VOLUMES.

VOL. 7.

TESTIMONY.

WASHINGTON:

GOVERNMENT PRINTING OFFICE.

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REPORT

OF THE

COMMISSION APPOINTED BY THE PRESIDENT TO
INVESTIGATE THE CONDUCT OF THE
WAR DEPARTMENT IN THE
WAR WITH SPAIN

UNIV OF
CALIFORNIA

MEMBERS OF THE COMMISSION

CHIEF OF COMMISSION
MEMBERS
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CHIEF OF DIVISION
CHIEF OF SECTION
CHIEF OF BRANCH
CHIEF OF OFFICE
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CHIEF OF DETACHMENT
CHIEF OF PLATOON
CHIEF OF COMPANY
CHIEF OF BATTALION
CHIEF OF REGIMENT
CHIEF OF BRIGADE
CHIEF OF DIVISION
CHIEF OF CORPS
CHIEF OF ARMY
CHIEF OF NAVY
CHIEF OF AIR FORCE
CHIEF OF MARINE CORPS
CHIEF OF COAST GUARD
CHIEF OF NATIONAL GUARD
CHIEF OF RESERVE
CHIEF OF MILITIA
CHIEF OF VOLUNTEERS
CHIEF OF CITIZEN ARMY
CHIEF OF CITIZEN NAVY
CHIEF OF CITIZEN AIR FORCE
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CHIEF OF CITIZEN CITIZEN MILITIA
CHIEF OF CITIZEN CITIZEN VOLUNTEERS

IN EIGHT VOLUMES

VOL 7

TESTIMONY

WASHINGTON

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TESTIMONY.

WASHINGTON, D. C., *December 16, 1898.*

TESTIMONY OF CHAPLAIN HENRY C. MCCOOK.

Chaplain HENRY C. MCCOOK then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By General BEAVER:

Q. Please give us your name.

A. Henry C. McCook.

Q. Your address?

A. The Manse, 3700 Chestnut street, Philadelphia.

Q. Pennsylvania?

A. Yes, sir; there is no other Philadelphia.

Q. Your rank during the war with Spain?

A. I was a chaplain.

Q. In what regiment?

A. Second Pennsylvania Volunteers.

Q. Did you have any special service during the war under the direction of the President; and if so, what?

A. I was at first detached for duty to visit the camps of the country in connection with the work of the National Relief Commission. I afterwards went to Santiago de Cuba on the same errand, returning on the 5th of August. I visited the President on the 6th, and on the 7th was again detached from service as chaplain of my regiment and sent to Santiago on special duty with the sick, and for other service, including the location and designation of the graves of the dead soldiers.

Q. Kindly give us, in your own way, Doctor, what you saw in connection with the National Relief Association in its relation to the troops in the field, and, incidentally, you may say how, when, and where it was founded, and also what you did in connection with the special service for which you were designated by the President.

A. Well, of course, my special service designated was in Santiago, and the second expedition there was entirely different from the first, and without any relation with the National Relief Commission. I will take your first question first. The National Relief Commission was founded, I may say, in a measure through my own efforts on the 17th day of April, this year. It was commenced by a movement in my own congregation; and afterwards we procured the names of a number of the leading clergymen of the city, calling a representative meeting of the various churches and the ministers and officers of the churches on April 25. We then organized ourselves into a commission—the National Relief Commission—for the purposes which are set forth in the circular I herewith present. We elected as officers Mr. John H. Converse, president, and Mr. Thomas, the head of the banking firm of Drexel & Co., as treasurer, and an executive committee, of which I was chairman. From that time we began our work among the soldiers,

first aiding the soldiers at Camp Hastings, some of the regimental hospitals of the Pennsylvania National Guard. This commission was organized on broad principles, with the hope that we could take in all the States of the Union. New Jersey, Pennsylvania, and Delaware were the three States represented in the original organization. We thought we would have combined in one the aims and efforts of the Christian commission and the sanitary commission of the civil war. We did not succeed entirely in that, because some organizations of a more or less local character were made, like the Illinois and Massachusetts aid societies; and the final policy of the President was to recognize all alike and give no special recognition to any. But our work was not simply local. It covered all under the flag without regard to State or service. A committee, consisting of ex-Governor Pattison, Mr. George C. Thomas, and myself, visited the President and had a conference with him. He was sympathetic with the objects of the commission, but referred us to the departments, with the final results I have stated.

We went first to General Alger, who received us most cordially and hailed the advent of such an association. He assured us that we would have the most cordial, active, and most sympathetic cooperation of the War Department in every legal way, and, pausing, he added, "Yes, gentlemen; and any illegal way, if it is necessary to carry out the benevolent purposes of your noble society."

Our work, which began April 17, was without special governmental recognition until the 17th of June, and at that time—

Q. I think, Doctor, your first efforts must have been the 17th of May, as war was not declared until—

A. Ah, but Philadelphia is always in advance in everything patriotic and philanthropic. Our organization was made before the war began, and when the first trumpet was blown we were there. It was started on the 17th of April, and on the 25th of April we were ready for work. On the 17th of June I was here, seeing the Secretary of War, accompanied by Senator Hanna, a member of the commission, and on the 17th of June he gave us authority to enter all the camps of the United States Army to establish stations and substations, etc. From that time we had our agents in the field. We had one here in Camp Alger. Our fellow-commissioner, Dr. George W. Bailey, was here the latter part of May. At all events, it was the beginning of the time when surgeons were at war with one another over the establishment of division hospitals. He found those hospitals just started, with nothing in them but beds and men. He immediately relieved their wants. I visited Camp Alger a week thereafter, and was several days going through it. We then supplied for thirty days the hospitals of that camp with ice, drawing my check and paying Chief Surgeon Girard. We had agents at Chickamauga and at Tampa. At Tampa I visited the camps with Rabbi Krauskopf. We supplied many requisites to the second expedition to Cuba under General Randolph to reenforce the troops there. We made large grants to Camp Thomas, Chickamauga. We have an agent now at Camp McKenzie, Augusta, Ga., dispensing supplies of all kinds. I could go into details, but these details I would like to furnish later as a part of my testimony. We have received in the neighborhood of \$130,000 in money and supplies. The sum is not a large one, but under such men as President Converse, Treasurer Thomas, and Joshua Bailey, the chairman of the committee on supplies, Mr. Reeves, and other brainy men of the committee whose names you will find in the circular, a dollar of our money went as far as \$5 with a good many other people. I would say our supplies were judiciously selected, and with an eye to get to the men what was most needed in hospitals and least likely to be supplied by the General Government. The knowledge of men who had a great deal of experience in hospitals was brought to bear on this question, and I must say they hit the mark always. Our general secretary, Dr. M. S. French, is a very energetic man.

I went first to Cuba on the U. S. S. *Resolute* and saw all the supplies landed there on the 25th of July. We sailed from home on the 19th, two days after the surrender. The supplies furnished by the relief commission were usually the first the doctors wanted. The Government sent out by the *Resolute* a large quantity of hospital goods. There were practically none at that time in the Army. On one day that I went through the camp General Shafter stated that 4,122 men were on the sick roll, and I did not see but one man lying on a cot. The men were on the ground, on rubber cloths, dog tents, or blankets, and some without blankets, for they had thrown them away in the terrible heat, fatigue, and excitement of battle. The doctors came down as soon as they heard that the *Resolute* had arrived. There was no difficulty in getting our supplies that day, and very little from the Government officials. I think I can say that among the things first called for were those of our commission, things selected for special diet that men would need who could not digest salt horse, hard-tack, beans, and things of that kind. We have continued our work up to the present time. A large part of the useful work of our society has been in taking care of men since the war was closed. At the beginning of hostilities the use of Philadelphia's hospitals was tendered through our commission. It was not accepted until typhoid fever became epidemic. Then the offer we made to the Medical Department was accepted, and it was the office of the National Relief to take care of a great many of these men, looking after them in camp and getting them to the hospitals. We brought them to Philadelphia from Camp Meade and from other places. I do not know how many camps.

Q. About the number you can give in your statement?

A. Yes, sir. We sent \$4,000 worth of delicacies on the *Resolute*; thousands of tons to Chickamauga; 60 to 80 tons in the expedition to Porto Rico on the yacht *May*, tendered by Mr. and Mrs. Van Rensselaer, sailing under the flag of the commission. We had a pretty flag and badge. I would like to present you with one. (Places one in the hands of one of the commissioners.) We sent other cargoes to Porto Rico, thirty tons of oatmeal and potatoes at one time; 150 tons of supplies in all, and of the best sort. We also sent several thousand dollars' worth of well-selected medicines, up-to-date material. We also sent an ice machine to Ponce, which did noble service for the sick, and is still in operation. In Tampa we found no voluntary society at work. In Camp Cuba Libre, at Jacksonville, we found a Red Cross representative. We went to Tampa and found no organization there. We found no one there at all, and we supplied the sick with a great deal of material. Dr. Krauskopf also visited Key West and Miami and made large grants.

Q. Did you receive the hearty cooperation of the Medical Department in your work?

A. At first General Sternberg was inclined to look at us with a distant complaisance. He seemed to think there was no need for us; and the Navy Department suggested if we had anything to give we had better send them money. On the 20th of June, however, General Sternberg had a different view, and received us very heartily, and gave us a list of supplies which he thought was best to furnish. In Camp Alger when we came to the officers in charge of the sick men they were very willing to take everything we had to give. In Tampa we made out a list of supplies, which we purchased from the stores. We furnished a great number of pajamas, mosquito nettings, pillow slips, soap, combs, brushes, sheets, spitboxes, refrigerators, socks, slippers, bath tubs, and tubing (for typhoid cases)—everything asked for, in fact, and medicines, too; quantities of malted milk, and ice. We found all the surgeons willing to take and grateful for whatever we had to give them. They cordially received us everywhere as soon as they found we were not philanthropic fakes, especially as we made no attempt or pretense to

work independently of them. That we were careful to avoid. Our idea was to work through the surgeons, as far as hospital supplies were concerned, and not act as an independent organization.

We also had a moral phase to the work of our society in supplying the men with books, magazines, and reading matter. A song book and Spanish phrase book were published by us, which were in demand everywhere. The idea of the latter was to enable the troops to pick up enough Spanish to get along with in their new conditions. We sent, I think, 50,000 of the song books and 40,000 Spanish phrase books. Our books were song books and not hymn books—patriotic and other songs, with a few hymns for chaplains' service. We thought that by brightening and enlivening the men we could contribute to their health and happiness. In Camp Alger I visited Chaplain (Father) Sherman, of the Fourth Missouri, and supplied him with a tent to hold his church services in. We furnished him with 500 gospels contributed by Archbishop Ryan, one of our most faithful members. They were of the version of the Roman Catholic Church. To the same chaplain we also sent portions of the Protestant Bible. We tried to furnish everything necessary to contribute to the moral life of the men, and make their camp life a pleasant and happy existence.

Another part of the work was to take charge of the families of the men at the front. We had 1,500 or 2,000 in various neighborhoods whom we took care of during the entire time of the war. We tried to be careful about selecting those in actual need, and some of these families we still keep on our list.

I think I have touched on all the departments of our work, and I would have brought the details, but I did not know I would be asked about this matter until last Saturday evening. On Monday, when I expected to visit the relief office, I was called to attend the funeral of Colonel Hogg, of Baltimore, an old Confederate officer, and during that time an order was passed instructing the secretary not to appear, but to send a report. Further, a resolution was passed substantially closing the mouths of the other members of our organization. But that I regard as nill as relates to anything that this commission wishes to know from me.

By General WILSON:

Q. Do you know what the object of that was?

A. I imagine one idea may have been to wait until a report was made out and then have it sent to your commission in shipshape. What personal motives our secretary may have had I will not venture to conjecture. At all events, that was the action; and, if it would not be asking too much, I would like the privilege of introducing as part of my testimony, after I have examined and approved it as such as I could swear to, the statements of the secretary and treasurer. I request this, as I have understood that the report would not be received here, not being in the shape of sworn testimony, and I would be sorry not to have it appear. So far that comprehends the general character of the National Relief Commission, and the actual services are a matter of detail, and of an immense amount.

Q. Now, Doctor, your service under special assignment made by the President is a matter about which little is known.

A. As I stated, I went to Cuba on my first visit as a representative of the National Relief Commission. I was then chaplain of the Second Pennsylvania United States Volunteers. My regiment was assigned to duty in guarding Dupont's powder mills. I think I am safe in saying there was no better regiment in the National Guard or volunteer service.

Q. Was that Col. Biddle Porter's regiment?

A. Yes, sir; and it was a mystery to me why it was not sent to the front. It was divided into two battalions, one encamped just outside Wilmington and the other on the opposite side of the river in New Jersey. They were under the

shadow of churches, and the good Christians of the neighborhood, having no other soldiers on whom to vent their patriotism, much attention was bestowed on them. I had made an agreement with Colonel Porter that if I could get on the firing line where I could do the best service I was going, and under the above conditions I was ready to leave my regiment. On the first expedition I was detached from duty for the National Relief Commission. I was in Santiago a week after the surrender—just before the “round robin” was propagated. I saw the entire camp of the victorious army. I returned home on the 5th of August. On the 6th of August I visited the President, and was for quite a while with him telling him what I knew about conditions at Santiago. I told him, among other things, that the soldiers who had fallen upon the field were buried under such conditions as, in a tropical climate, would soon cause the graves to be lost to sight, and many of the bodies could never be identified. He immediately picked up a piece of paper from his desk and wrote an order, a copy of which I have here, and which really answers in part the question why I went to Santiago. I will read the order:

“EXECUTIVE MANSION, *Washington, August 6, 1898.*

“*Ordered*, That the graves of our soldiers at Santiago shall be permanently marked. The present marking will last but a short time, and, before its effacement occurs, suitable and permanent markers should be put up. The Secretary of War is charged with the execution of this order.

“WM. MCKINLEY.”

That order was sent out to the Secretary of War, and before I left the President the Secretary sent word that he would like to see me. When I paid my respects I found the order had been already telegraphed to General Shafter. Then I offered to go back to Santiago, where the yellow fever had broken out and dysentery and typhoid and calentura were epidemic. My duties were to be with the sick in the various hospitals, to locate and designate our heroes' graves, and for such other service as might be required of me. I was assigned by General Shafter to the staff of Dr. Havard, chief surgeon. My first duty, at the request of General Wood, was to reorganize the civil hospital for the care of Cubans, which I did, spending two or three weeks thereat. It was a dreadful experience. I have seen nothing worse in the course of a varied and eventful life, unless it be the scenes attending the repatriation of the Spanish soldiers.

Q. That was in Santiago?

A. Yes, sir. Then I started, after that matter was put into some sort of shape, to visit the heroes' graves. My portfolio shows something less than 400 that I located and designated, not including the numerous dead at Siboney. I took a number of photographs of the graves and many sketches. I have here some views which will perhaps illustrate the timeliness of the President's order. For example, here is the grave of John Booth and William Preger, Seventy-first Regiment New York Volunteers. These [indicating] are two kodak snap shots and this a pencil sketch. These men were buried in July and I made the photographs in August. You can see that most of the stones that delimit the grave are wholly covered by ground vines. In order to make this sketch I tore this wild vine [indicating] away. Observe that nearly all the grave had been hidden under the rank foliage.

This is the grave of Daniel Lonegan, Thirteenth Infantry, buried on the plain fronting San Juan Hill. You will see how that grave was nearly overgrown by rank grass and herbage, and how nearly impossible it would have been to identify it in a little while.

Q. Doctor, how long was this second picture taken after burial?

A. About six weeks. It was taken about the middle of August. I have here, also, a view of the grave of Lieutenant Lewis, which illustrates the same fact.

[Producing card.] There is another element that endangered the integrity of the graves and imperiled identifying. These are views of the grave of Lieutenant Sater [indicating on card] and two men buried on the bank of the Aguadores River at a point known as the "Bloody Bend," and that place is subject to overflow, as you see.

Q. Those graves are shown as you left them?

A. Yes; except Booth's, which is now as in the pencil sketch.

Q. Did you find them in that condition?

A. Yes; as in the photos. The sketch shows the graves of Booth and Preger as I left them.

Q. Is this your work here? [Indicating sketches.]

A. Yes; that represents the graves exactly as I found them there. After I had done much of this work about the graves, Mr. R. H. Rhodes, of Washington, who is connected with the National Cemetery, was sent to Santiago with two aides and 800 headboards, instructed by General Ludington to distinctly mark every grave. One of the first experiences he had in landing his supplies was that some fellow stole some of his headboards. The soldiers tore down the blockhouses, even the historic one on San Juan Hill, to supply kindling wood for cooking. Perhaps the headboards went in the same direction. I had already arranged with Captain Gonzales, one of the most thoroughly kind and efficient officers I had seen, for putting up markers, but when Mr. Rhodes came we were relieved from the necessity of doing that. Indeed, I felt that my own work might now cease. I do not think a more efficient man than Mr. Rhodes could have been appointed. He had to meet the difficulties which I had encountered in crossing streams, and threading tangled woods and plains, and braving torrid suns and tropical rains. The soldiers of the Fifth Army Corps had gone, as the exodus from Santiago had already occurred, and there was no one to show where the bodies of their comrades were buried. My notebook shows in a most interesting way the manner in which soldiers took care of their comrades' graves. After I had gone over the battlefields of Marines Hill, Guantanamo, San Juan, El Caney, and through the various hospital cemeteries, I was taken sick with the calentura, or Cuban fever—a cross between the grippe and break-bone fever—and I left for home on the *Seguranga*. I was not able to resume pulpit duty until the middle of October. I do not know that there is anything further of interest about the martial graves; but I must say that the country owes to the President and the Secretary of War a great debt for the sympathetic consideration shown, and the prompt manner in which this matter was taken up. It seems a sentimental thing, but if you gentlemen could read the letters sent to me, and see the people who continue to write and come, you would say that there is much in the sentiment. A fallen soldier's father came to my house a few days ago, asking to know about his boy, who was killed in front of San Juan Hill, and to see that gray-haired man standing there crying from mingled joy and grief when I showed him a drawing of the grave in which his brave son slept repaid me for all my efforts.

By Colonel DENBY:

Q. How did you find the names?

A. Nearly all were marked in some rough way—a piece of an ammunition box, or provision box, or cracker box, or sometimes just a stock on which was written in pencil the name of the man whose grave it was. At El Caney, where Lieutenant McCorkle was buried beside some men of the Twenty-fifth United States Infantry (colored), they stripped the bark from two trees that stood at the grave's head and wrote on the peeled space: "Roll of honor, Twenty-fifth Regiment," and underneath this the names of the slain were carved. Some of the graves were decorated with empty cartridge shells and cartridges were taken from the belts.

These were thrust into the soil so that their round heads would mark out a cross, or a heart, or "R. I. P.," or "Peace." Sometimes these decorations were made with white snail shells from the gravel beds. The mounds at times were covered with stones like cairns, with the idea to protect them from wild beasts and buzzards. Others were simply edged around with stones. It was interesting to see how comrades cared for their fellows. In hospital cemeteries I did not see the same evidence of sympathy; the sick were separated from their comrades there. There was not that individuality of comradeship that secured care for the men, living and dead. For the most part the hospital dead were buried in the Spanish trenches and runways—I won't say for the most part, but a great many were—and sixty-six in one of the hospital cemeteries. This was doubtless to save the digging of graves by the feeble survivors; but they were all marked. In one hospital there were only ten graves marked out of thirty-four, and the Lord only knows who were in the other graves. I recently saw in a paper the statement that no soldiers were buried around Santiago whose graves were not marked; but there are exceptions. And again, at El Caney, at what the Cuban guides called "the American cemetery," on the northeast of the firing line, just beyond the height called El Coronal, there were forty-three buried in a line, and the only two graves inscribed with names were those of Lieutenant Wansboro and Lieutenant Dickinson. The others had nothing but short twigs numbered on the top, but I hoped this might give a clue to the names.

I did not get to Siboney. The day before I had made all arrangements to go with a photographer and my interpreter I was taken sick, but I was told by Hospital Steward Parker that, except about nineteen, the graves of all persons buried at Siboney were marked, and that a bottle containing the name and description of every man buried was placed in the grave. Parker had been seventeen years in the regular service, and he is one of the men who should be given a commission. He did this, he said, as a matter of duty and decency. "But I had another motive, Doctor; I am a Freemason, and did not know but some of the dead soldiers belonged to the order." I am not a Mason, but I appreciate such good fruits as that.

I do not know that there is anything else to tell about that. I have some recommendations which I presented in my report to the Secretary of War, which I would be glad to present here. I recommended that the list of the identified dead be printed and distributed throughout the country, as the interest I have observed therein seems to justify this work. The people are interested to know where their sons lie or have lain, and I think the lists and charts prepared by Mr. Rhodes, to say nothing of my own work, should be carefully printed and distributed to all friends of the dead.

Then, I would like to recommend another thing. I invented a model of a grave marker—a small tablet of copper or tin or brass or other metal, something in this shape [indicating], which folds up in this way [indicating], with a card inside giving the name and company of the dead and of the burying party, with a common wire rod with a little hook or bend on which to hang the tablet. A number of these can be put in a small packet and the graves of the men in the hospitals and on the field can be marked with them without difficulty. I believe that this ought to be arranged for. It belongs to the Quartermaster's Department. But it seems to me there is a mistake here. In the civil war the chaplains used to attend to this very largely; but a chaplain in the regular service is a sort of unknown quantity in most cases. He is a post officer, is rarely assigned to regimental duty, and so is apt not to be present to attend to the burying of men and the marking of graves. I think this should be designated as part of the Medical Department's work. Let some of the Hospital Corps be assigned to this service. When a man falls, or is carried to the dressing lines or to the hospital, or is

buried, let them use these little marking tags. It would be but the work of a few moments, and would secure identification for more permanent marking afterwards.

By Captain HOWELL:

Q. About how many graves did you find unknown and unmarked?

A. I do not know exactly; there are 41 in one place, and 34 minus 10—that is 24—in another place. Occasionally on a battlefield there was an unmarked grave, but for the most part around San Juan they were marked. Around Las Guasimas they were mostly marked. At Guantanamo Bay all were well marked. I would estimate about 80 unknown soldiers in graves seen by me, many of which will probably be identified hereafter.

Q. Is not the War Department bringing the dead to this country now to be reburied?

A. Not yet. I think all thus far have come through private enterprise; friends have sent for them. But there is a Government appropriation for burial.

By Colonel DENBY:

Q. Did you recommend the establishment of a national cemetery in Cuba?

A. I reported on that point, and did recommend that if we should have a national cemetery there, San Juan should be selected. It seems that every historical consideration would suggest that. The Rough Riders Hill or Kettle Hill and the plain over which our men charged should also be taken and the whole reserved as a national cemetery, if such is used. The section is dry, gravelly soil, suitable for purposes of interment, and the dead could be removed to that location without difficulty. I have recommended that the graveyard at Guantanamo Bay, on Marines Hill, should be taken especially for a naval cemetery. There are fifteen persons there, and Sergeant Smith, who is buried just beyond. Including Surgeon Gibbs, U. S. N., there are sixteen buried there, about half sailors. It would be well to take that and use it for the men who have died and will die there.

I might say here that I made some inquiries as to the methods of armies in other countries. I got reports from Great Britain and Germany, and I find that in that respect we are not any worse than others, but indeed a little better. I had a report from an officer who was in Obdurman and the Soudan, who says the marking of graves is left to the several regiments, they having no system. In the German army it is the same. The soldiers' graves are marked by an iron cross, with the words (in German), "Here rests a brave warrior." No names are added, except in special cases. They are looked after by certain societies called Kreuger Verein (soldiers' societies).

Our soldiers, even those who died in hospitals around San Juan, were buried uncoffined, except a few who died in what was known as the "nautical hospital." It was in the boat club of the Santiagoans, at the edge of the harbor, and when I saw it first it was crowded with sick men, even on the landing place, all lying on the floor. But they soon had them on cots after the arrival of the *Resolute*. With that exception all of our men were buried just as they died, wrapped up in their clothes and dropped into the runways or into prepared graves. I see no excuse for not burying them in coffins after the surrender. The quartermaster would have supplied coffins if applied to. Even the Cubans, except the very poorest, who were dumped into the dead carts, carried away and burned, or promiscuously buried, were provided with coffins. There was no excuse for our soldiers being buried without coffins. To prevent this in future I have recommended that the Quartermaster's Department should get up sectional burial boxes. It is a grewsome subject, but men who go to war must remember that some have to die; and those who send them must take care for their burial. These boxes could be simply framed and fastened together with a few screws.

By Dr. CONNER:

Q. General Emery sent up a regiment with forty coffins under the buoys of the steamship, and the men complained of it.

A. Yes, coffins are not a pleasant prospect. But, nevertheless, soldiers want to know that they are going to be buried respectably if they die. They are very particular about their comrades' treatment. And sectional boxes would not be noticed nor their purpose known.

By Governor WOODBURY:

Q. Should not the Medical Department supply the coffins?

A. I do not know why. But hospital authorities should see that coffins are provided. I think in view of what I have shown that an early decision should be made as to whether we shall have a national cemetery in Cuba, or whether our dead should all be brought home.

By Captain HOWELL:

Q. Were the graves scattered?

A. Yes, sir. At El Caney, for example, they are scattered over the whole firing line, entirely surrounding the stone fort on El Viso. They are scattered all over the plain and heights at San Juan. It was often difficult to find them. Of course near the hospitals, or where they had been, we would find little bunches of graves. For the most part records were made of deaths. I do not know that the Medical Department has preserved the records of the dead at Siboney. We found the hospital stewards generally making records around Santiago, and possibly the Medical Department will have them.

By Dr. CONNER:

Q. That is at the Surgeon-General's Office, or will be?

A. Yes, sir; I think it should be so, but believe they are not there now.

By General BEAVER:

Q. Did you have an agent of your society at Porto Rico?

A. Yes; Dr. Groff was there.

Q. Do you know anything as to his report of the conditions there?

A. I saw one report of his, a letter which had been sent and which was recalled, if I remember rightly, a letter perhaps not very prudent. I was away, however, when this affair began. Dr. Groff, however, from what I knew of him personally before I went to Cuba, and from what I heard of his services after, was a very efficient officer. He was made a surgeon-major afterwards in the Army.

Q. He is a man of wonderful knowledge?

A. Yes, sir; and he did excellent service for our commission. We sent him to Porto Rico on the *May*, and he was quite active in distributing 60 or 80 tons of supplies that we sent there. We afterwards sent several consignments to him; fully 150 tons of hospital supplies.

Q. Did you see the communication which was withdrawn?

A. Yes, I saw it; it was before our commission; I read it.

Q. What was the nature of it?

A. I really have forgotten; it was not in my line of business; I just looked it over; but I think it made scathing criticisms of some methods there. It was not anything that an honest man might not write. It might have been a little over-colored through zeal, I don't know; but I do not think it was anything that an honest man, who was indignant at inefficiency and needless suffering, might not write.

By General WILSON:

Q. Did you have these photographs taken yourself?

A. The small ones I took myself. The field pieces were taken by an old Spanish soldier. He slipped out of the intrenchments after surrender and took refuge

with his reputed wife, and when he found the Americans were not going to eat him up, opened his shop, and I employed him to go around with me. I kept him until he broke down with fever.

By General BEAVER:

Q. Some of the members of the commission would be glad to know what you observed as to the conduct of the hospitals, as to the conditions that existed there, and as to the sufficiency of supplies, etc.

A. In Santiago?

Q. Yes.

A. When I first went there, landing about July 25, there was a dearth of everything. We went to General Shafter's office and stated that we had come on the *Resolute* and brought a great lot of supplies. He called one of his orderlies and began to read a letter just received from Dr. Le Garde at Siboney, where the yellow-fever hospitals were, stating that they wanted so many cots. We said that we had several hundred of them. He continued: "Our doctors are all sick and we can not take care of the men." Our answer was: "We have ten or twelve immune contract doctors, and you can have them." Then he read: "We want fifty nurses." And the answer was: "We have just that number here, of whom ten or a dozen are women nurses, yellow-fever immunes." It was the first experiment in that direction. I afterwards said to General Shafter: "Does not that look a good deal as though Providence had something to do with this outfit?" And he nodded assent. Diarrhea and dysentery were prevalent. Doctors could not get bismuth, a drug necessary to check that trouble; but the *Resolute* brought it and much more from the Medical Department necessary at that particular time. Food supplies—ordinary rations—were abundant then. The harbor was filled with vessels which apparently could not get a chance to unload their goods. But the *Resolute*, with hospital and medical supplies and sick diet, was given the right of way, and the Cuban stevedores were put at once to unload the things. On my second visit I found matters improved; but there was still lack of suitable hospital supplies for the very sick and convalescents. Ice was at times abundant, but the supply uncertain.

Q. Was there any indisposition on the part of the surgeons to accept what you brought?

A. Not much. The doctors fairly swarmed down to the wharf. Among the first were Major Wood and Major Robinson. Captain Kieffer, of the artillery, came in such haste that he had evidently forgotten to put on shirt or undershirt, inasmuch as the bare skin showed through a big rent in the sleeve of his tattered blouse. Perhaps he was in the condition of a good many of the other officers who had not seen their baggage from the time they landed. When I returned on the *Iroquois* from my first visit I found several officers of high standing sick on the vessel. Among them was a well-known colonel of a regular regiment. He was very sick—so sick that had he remained longer in the country he must have inevitably died. When visiting him in his cabin I observed that he was resting on his couch clad in a wool shirt and his soiled infantry trousers. It did not take me long to learn that this accomplished hero had not seen his baggage since the day he landed at Daiquiri in June up to the present date, the beginning of August. It was still floating around the Atlantic in a transport. Presently I returned to him, bringing from my traveling bag a negligè shirt, some clean socks, clean handkerchiefs, and a fresh white nightdress. "Are these for me?" said the Colonel. "Yes, until you can get something better." The soldier raised himself upon his couch, and taking the garment with both hands, held it out before him, and with mingled tears and smiles cried, "Good Lord, Chaplain, a nightshirt—a clean nightshirt! My God, this is Heaven!" And he spread the garment out before him while the tears ran over his cheeks. I am pretty tough, but I could

not stand that, and ran out of the cabin, leaving the Colonel to the glory of his clean clothes. I told this story to the President after I got home, and he also laughed until he cried; and what is better, he dropped a star on the gallant Colonel's shoulder. Possibly our artillery surgeon was in the same condition, but he was determined to lose no time in getting whatever was on hand for his men. Trucks were run up into the midst of great piles of material on the wharf, and the most necessary articles were pushed down to ambulances and wagons until the immediate necessities were supplied. The material selected by the relief commission was in great demand. Dr. Banister afterwards told me, when returning on the *Segurança*, that the best thing he got from us was zweiback, a sort of baked bread. Nothing had been of such service to him in bringing the men back to health as this delicate and digestible material. The doctors simply had to ask for what they wanted and they got the things. There was no red tape about it.

By Captain HOWELL:

Q. The object of your association was to give the men what the Government could not give?

A. Yes, sir; our supplies were made up with that idea, and the doctors and others could get them by simply asking for them. No requisition was required.

Q. Nothing to be accounted for afterwards?

A. Nothing.

Q. Have you any ideas about what caused the lack of supplies, etc., in the Medical Department, and any suggestions as to remedies?

A. I have some ideas about the matter. Undoubtedly the War Department was not prepared for the emergency. Our little army of 25,000 was instantaneously expanded into ten times its size by the calling out of volunteers. There was a proportionate increase in the necessity for medical officers, and of course a vast increase in the character and amount of service required. Army surgeons, except the oldest, who had been through the civil war, had but little experience in the direction of great bodies of men. Their lives had been confined for the most part to frontier posts where they had the care of small bodies of men whose ailments were usually of a simple nature. The vast influx of volunteers from home life and the sudden appearance of typhoid and other fevers presented a series of complicated cases and conditions which they were unused to. It is the simple truth to say that some of these army surgeons were back numbers—a quarter of a century behind their professional brethren. The fixed system of promotion prevailing in the Army involved the placing of some incompetent men in very responsible positions. They simply could not widen into their places. Their mental horizons were too narrow. With the best of intentions they failed. The war was so short that there was really no opportunity to get rid of these incompetents. The better men, who only lacked experience and who would soon have shown themselves able to rise to the positions and widen out into them, did not have the opportunity to show the mettle they were made of. Much of the difficulty lay just in these two facts: The promotion of men who had not the capacity to fill exalted places, and the inexperience of men who had capacity but were not long enough in service to prove their competency to hold exalted positions.

As to suggestions, one great difficulty with the Medical Department is that the chief surgeons are charged with such a lot of clerical service that they have not time to give attention to their proper work. One of them said to me, when asking about a certain hospital, "The truth is, Chaplain, I have been so busy in my office that I have not had time to visit these hospitals." I do not believe he had personally visited more than one of the hospitals under his supervision. It is not right to so take up surgeons' time. I have a suggestion here that we should have two surgeons at every headquarters—one to do all the clerical work, and the other to attend to the absolute professional work. The idea of taking a doctor able to run

a hospital and making him see that papers are made outright! I certainly would recommend that they alter that. It is a shame that a man—think of Dr. Conner, here, sitting down, doing clerical work and coaching junior surgeons while men are dying! It seems to me not only folly, but wickedness.

By General DODGE:

Q. Whom would you assign to that?

A. Take a clerk to do that.

Q. There is nothing in the regulations about doctors not getting clerks.

By Dr. CONNER:

Q. What was your experience as to the condition of the sick soldiers on our transports?

A. My experience on the *Segurança* was peculiar. I came back on that ship, arriving on the 23d of September. I was sick when I got on board the ship. Dr. Banister, who is one of the best men in the regular medical service I have seen, as gallant as he is good, was in charge of the vessel. He had five men just out of the yellow-fever hospital. They were put there with pajamas and blankets; no clothing. There were about 100 men in all on the boat; a few well when they started, the others were convalescent to a greater or less degree of health. On board that vessel—now mind, she sailed on the 16th of September—on that vessel for those sick men there was nothing put in the way of nutriment but travel rations and some canned soups. Now, you know what travel rations are. Dr. Banister had been suddenly called to the place, and not allowed money commutation. We made a little arrangement; I supplied the cash, and we started a hospital ship. We bought some eggs (I think we paid 17 cents a piece), and we had soft-boiled eggs, milk punches, fresh-meat broth, and hot milk, toast, and tea, and mutton chops for these sick men. The cost was only \$225 in all, and Dr. Banister gave me a letter of thanks, in which he says that several lives were saved. The crew of the vessel served these things to the men for the most part.

By General BEAVER:

Q. Did you get this money again?

A. No, sir. I do not want it. It was a privilege to spend it. It was given to me by William J. Swain and his wife, members of my congregation, for this purpose. There was plenty more, the gift of my congregation; and my chaplain's salary was all expended in similar service for our boys.

By Governor WOODBURY:

Q. Do you know why that ship was not supplied with the proper food for convalescents?

A. I do not know anything about it.

By Dr. CONNER:

Q. Do you know how soon Dr. Banister was detailed before sailing?

A. The same morning or the evening before. He was not responsible for affairs. My impression is that the surgeon who was directly responsible, the one who was assigned to the duty of getting that ship off, was duly disciplined. As a rule, what I saw that I did not think was right I reported to headquarters. I did not rush into the papers, but I sent word to the President or Secretary of War, or to the men at the top, nearest at hand. I reported this *Segurança* business, and I saw that in about the time my message could get there and a ship get back, that surgeon came home. He was doubtless the man directly to blame. I do not know that my message caused it, but putting two and two together I concluded it made four.

Q. You say that the stewards' crew waited upon the sick men. Were there no hospital nurses on board?

A. Yes; there were two hospital stewards, very efficient men, one a Mr. Fairman, formerly of the Seventy-first New York Volunteers, and the other a Mr. Parker, from the regular service, who did their duty fully. There were also a few men going home to rejoin their regiments, who were detailed to assist in nursing, but the men assigned to that duty were chiefly convalescents. They were really not fit for the service at the best, but when they became seasick, as many of them did, they required care themselves. As to the well men, I do not think they were out of port more than sixteen hours before most of them were suffering with calentura. It is well known that in the transfer from interior to seaport or the reverse any latent fever germs are apt to make themselves manifest. It was hot as a furnace in Cuba, but northward of the Bahamas it grew cold. We had several regular army men on board who ought to have known better, but with the exception of one private and myself, there was not an overcoat on board, and mine was only a mackintosh. As soon as we got well out to sea we struck the cold weather. Any man who has traveled much on the water knows that at one time he may make a trip in a temperature of 80° or 90° and the next trip over the same course he may need his overcoat. The men coming home from Manila, Porto Rico, and other tropical places should never be allowed to take a sea voyage without overcoats. They are sure to suffer with cold when they get well out to sea.

By Colonel DENBY:

Q. We have had an immense mass of proof that the Government should have furnished all the delicacies and subsidiary articles that your society furnished. I want to ask if, in your opinion, the Government, acting by the regulations, as it always does, is it possible under those circumstances for the Government to supply the troops in the field with such things as are furnished by your society and other sanitary aid societies? That is, whether you think these societies ought to be done away with or made to exist?

A. You have put two "ifs" in. I should say no, in that case. But what is the use of such routine? If our relief commission and the Red Cross and the Massachusetts Aid Society could do this work, why can not the Government? If routine and red tape regulations are in the way, why not do away with them? They can not successfully be carried into the battlefield and the pestilence camp. Voluntary or unfettered methods can be.

Q. Suppose it is in the orders that they shall do all these things—what I want to know is whether in that case societies which you have described and organized would or would not be necessary and useful, in your opinion?

A. They ought not to be, but probably would be useful; because in twenty-five years it will be the same old story unless we are kept in a continued state of war. Nevertheless, army regulations should provide for such conditions. You must remember that the men and women who constitute these volunteer aid societies are drawn from the brainiest people in this country. They won't sit idly by and see their sons suffering or slain through official stupidity. They are at the very source of money and supplies, and better fitted to meet emergencies than our departments. They furnish free to the Government the experience and skill, as well as the money, and under the best conditions. You can not get that from the Army as at present organized and swathed in requisitionism. But I think voluntary aid should be under the general direction of the Army or in entire cooperation with it. I do not believe in any civil organization running in with independent operations. But I think volunteer associations working as ours did are a great advantage, and must always be so, to our popular Government, with its scattered skeleton Army.

Q. Would it be possible for the Government to adopt such free-and-easy methods?

A. Perhaps not entirely, but certainly there should be much greater relaxation than the regulations permit in war time. Some relaxation is allowed by present regulations. But is there any reason why a simpler plan—an emergency plan, if you please—for distributing necessary material should not be arranged for? What difficulty exists in the way of the Army that did not exist with our commission? If we could overcome it, why could not others? My thought is that disbursing officers might keep a simple system of checks upon which should be jotted the material furnished to responsible officers, who should receive a similar emergency check as the basis of a report. Indeed, all that need be required would be that the medical or other commissary should keep an account of goods distributed in the very simplest way. What difference would it make if a perfect system of accounts could not be presented? Our Regular Army officers are men of integrity, with scarcely an exception. I would trust them under any circumstances. They are certainly as worthy of being trusted as the agents employed by our commission. Even if there should be some pilfering by the men and laborers, is it not better to lose a few thousands of dollars than to sacrifice a few lives? For my part, in such an emergency as obtained during the Cuban campaign I would dispense with all formalities not absolutely necessary.

By Captain HOWELL:

Q. You say you were able to buy certain articles from the stewards on that vessel—the *Segurança*?

A. Yes, sir.

Q. Was it not possible for the Government to furnish all you furnished, except eggs, etc.?

A. Certainly. They did not furnish canned milk, for example, yet you could buy it from the commissary at Santiago in quantities. I do not know whether it is part of medical stores, but think so. It is not a part of the travel ration. So with other things. Surgeons and men on hospital ships or transports should have a money allowance, and on the *Segurança* they did not have it. It is economy both of life and money to enable surgeons to procure just what they need. Of course the skipper of the vessel provides only for his crew and passengers. An officer on a transport goes as a passenger, with a regulated per diem charge. If this commission would go out to Porto Rico, you would go as passengers, paying \$1.50 per day. Now, these provisions are furnished out of the private stores of the company running the vessels. The Government is supposed to take care of its men, and not the companies owning the ships. Their contract is to carry troops, not to feed them.

By Dr. CONNER:

Q. Would there have been any difficulty in the Government putting on the *Segurança* surplus stores, as she made trip after trip, carrying so-called passengers and sick soldiers? Was there any reason why stores in proper amount could not be placed to be drawn on by the medical or other officers when they were needed?

A. There is and was no real reason. If I had been assigned by the Government to that duty those stores would have been there.

By General DODGE:

Q. But the surgeon could have given an order and then given a voucher for it?

A. But a surgeon with a family and small pay could not be expected to take that responsibility without orders. He would soon be caught and strangled in the meshes of red tape and requisitionism.

By Dr. CONNER:

Q. Do you think it would have been possible for the Medical Department to have foreseen the difficulties and embarrassments that subsequently occurred?

A. It may have been beyond the power of the Medical Department to provide for anticipated difficulties, but I know of no reason why they could not have been and should not have been foreseen. The organizers of our National Relief Commission foresaw these difficulties. For example, on the 17th of April, when I asked my congregation to unite with me in a movement for such an organization, I stated the reasons therefor. Subsequently, when challenged by leading citizens, who asked why a rich government like ours could not do everything that was required for the soldiers without calling upon voluntary aid, I made the same answers that I did to my own people. Therein I referred to our experience in the early months of the civil war. I ventured to predict what would happen when our volunteers should be gathered in camps and when the troops should be scattered in the theater of war, which was likely to be Cuba. I spoke of the unreadiness of the nation for war, of the manifest inexperience of our departments, and of the great burdens that would suddenly be hurled upon men who would be broken down under them. I referred to the peculiar army system of requisitions and red tape, and described the formidable obstructions which it formed to the efficient helpfulness of men under great emergencies. I ventured to predict certain things that would happen inevitably; and references to my addresses of those dates will show that, with a single exception, not one of those things which I declared would certainly happen failed to happen. I succeeded in convincing the gentlemen who formed our commission that they were not asked to embark upon a visionary scheme, but that it was an actual necessity to be met, in which their patriotic sentiments and charitable sentiments would find full play. If we, in Philadelphia, could foresee the difficulties almost certain to arise requiring special efforts and aid, why could not the Medical Department have done the same?

Q. What was the one thing that you predicted which did not occur?

A. I said that in the event of a summer campaign in Cuba our Atlantic coast would certainly be dotted with camps containing returned sick soldiers in which the divers forms of tropical diseases would be centered, and among them yellow fever. I felt sure that that pestilence would be brought to our Southern ports, and that we would have to establish camps of detention, which would require an unusual amount of care. In this respect, I was happily disappointed. The yellow fever had a lodgment upon our southwestern coast, but not upon the Atlantic shore. I think our Medical Department is fairly entitled to the credit of accomplishing this splendid result. It may have been more by good luck than by good management, but the just inference is that the Medical Department, by its skillful efforts, warded off this terrible pestilence from our shore. I have heard the Department greatly censured for establishing a camp at such a far northern place as Montauk Point. I do not join in that censure. It is true that the transition from hot Cuba to that latitude involved some suffering, and perhaps sickness and death, but it was necessary in transferring the Fifth Army Corps, filled as it was with germs of yellow fever, to send it to a point absolutely inhospitable to the nurture and dissemination of yellow-fever germs. The Medical Department did its duty in that respect. Had the camp of the Fifth Army Corps been placed in a southern climate, or not as far north as New Jersey, the fever germs might have been and probably would have been disseminated and the whole coast infected. In that case the Government would certainly have had need for the National Relief Commission, and all the other voluntary aid associations in the field.

By Governor WOODBURY:

Q. Is there anything, and if so, how much, in the idea that voluntary societies furnish media through which the patriotism and sympathy of people can be shown; and being backed by that sympathy and patriotism and business ability which you have described, are they not useful, under any circumstances, to the Government in time of war, however much they may divide themselves or the sick or wounded?

A. Yes, sir. In a paper we presented to the President asking for his recognition was a clause expressing that very thought. The President spoke of it two or three times. He said our society was a channel through which the nation's patriotism and emotion could have vent; and further said that the country under present circumstances must have some such way of expressing these feelings, and it would be a benefit to all concerned.

Q. I think they are invaluable in that respect

A. So do I; decidedly.

By Dr. CONNER:

Q. Well, it is equally true the Government should provide for the sick and convalescent.

A. Undoubtedly that should be its ideal and aim; and not only to provide good and abundant food and medicines and good nurses, but good cooks. I think too little is made of that. The diet kitchen is one of the most important features of modern hospitals. Something analogous to it should be introduced into the army hospital service. A large part, I might say the most part, of the Hospital Corps in the Cuban campaign were wretched cooks. The cooking that some did was simply horrible. The policy of the Medical Department at first was to have no women nurses. I think that was a mistake. It never ought to be repeated. I do not see why the Government could not organize and maintain an auxiliary corps of women nurses. Some of the enlisted hospital nurses that went down to Santiago as yellow-fever nurses were as mangy a lot as I ever saw. Some were simply thieves. They knew nothing of nursing, and so far from being immunes, had never seen yellow fever.

Q. What was your observation as to the value of women nurses in the army hospitals?

A. My observation was that it was a success, and the weight of the testimony which I got from others was to the same effect. The women nurses in and around Santiago appeared to me to be faithful and efficient. Some, of course, more so than others. But the poorest were jewels as compared to the hospital nurses. These women nurses were not all young or pretty. Some of them were old, and some were black women; some of them were ladies by rank, but with a few exceptions. I heard only one testimony concerning their efficiency and that a favorable one. In the general field hospital just outside of Santiago women nurses were introduced, and they occupied tents in the encampment just as did the enlisted hospital nurses. There appeared to be no difficulty in preserving that natural modesty and retirement due to their sex. They brought a touch of home to the cots of the sick men, and they knew how to cook simple things, and made even army rations reasonably palatable. From the beginning I strenuously advocated the use of women nurses in our stationary hospitals, but confess that I had doubts about introducing them into the field, as I feared they would require so much care and protection and seclusion that the value of their services would not compensate for the inconveniences and losses necessitated. I am almost persuaded to drop that opinion; quite so as to stationary hospitals under canvas. I am not sure but that I could even organize a corps of hospital nurses suitably dressed and equipped and with proper ambulance accommodation who could accompany the troops to battle and serve in the rear at the field hospitals with the largest success.

REPORT TO THE HONORABLE SECRETARY OF WAR MADE BY REV. DR. HENRY C. M'COOK, CHAPLAIN SECOND REGIMENT PENNSYLVANIA VOLUNTEERS, CONCERNING SUNDRY DUTIES TO WHICH HE WAS ASSIGNED, IN SANTIAGO DE CUBA.

PHILADELPHIA, PA., November 15, 1898.

Hon. R. A. ALGER,

Secretary of War, Washington, D. C.

MR. SECRETARY: I have the honor to report to you concerning the duties in Santiago, Cuba, to which I was especially assigned by you, being detached for that purpose from the Second Regiment Pennsylvania United States Volunteers August 7, 1898. I arrived in Santiago August 15, and reported to General Shafter, who received me courteously, and August 17 attached me to the staff of the chief surgeon, Dr. Havard, for such services as I might be able to render.

I.—SERVICE DURING OUTWARD AND RETURN VOYAGES.

During the outward voyage on the *Yale* I was applied to for relief by a delegation from a detail of fifty-one men who were on the way to Cuba for service in the Hospital Corps, and had embarked without any commissioned officer in direct charge and without any travel rations, at least without any that could be found by the officers of the vessel after faithful searching. These men, as it seemed, had been almost without food for from twenty-four to thirty-six hours. Arrangement was made to feed them in the mess room of the crew at the rate of 30 cents per day. For this considerate act credit is due to Captain Wise, the commander of the *Yale*, who, although I agreed to become personally responsible for the cost, assumed the responsibility of reimbursement to the steamship company by Government. On arriving at the Santiago dock I continued my interest in these men, procuring them quarters for the night on the *Berkshire* and also coffee for morning and evening meals. As soon as they could be reported to headquarters they were distributed to their various stations.

I also took charge of five Sisters of Charity who had been sent out as nurses, and I was enabled to contribute much to the comfort of these good Christian ladies. The first duty to which I was formally assigned was the location of the sisters at the civil hospital. Circumstances did not seem to justify their remaining, and on the next day it became my duty to see them placed aboard the *Yale* for return to the United States.

II.—REORGANIZATION OF THE CIVIL HOSPITAL.

At the request of General Wood, I was at once assigned to the duty of reorganizing the civil hospital, which is the established municipal hospital of Santiago City. This was done to the expressed satisfaction of both General Lawton and General Wood. My work was greatly facilitated by the services of Rev. H. C. C. Astwood, whom I had employed as interpreter, and by Señor Antonio Bravo, advocate, who actively supported me by putting me in personal communication with Spanish physicians, apothecaries, and other needed helpers, who could hardly have been obtained without such practical aid.

The reorganization of the hospital was made necessary by the contemplated withdrawal of the Spanish Sisters of Charity, who had been directed to accompany the captured and repatriated Spanish soldiers on their voyage home. These devoted Christian women had borne the responsibility and performed the perilous, onerous, and self-sacrificing duties of ministering to the sick under difficulties which it is well-nigh impossible to describe. It is due to them to say that no heroism wrought in the ranks of American or Spanish soldiers and sailors was exceeded by that which these sisters displayed in bravely facing the terrors of disease in its multiform phases that ravaged the poor Cuban inmates of the civil hospital. These were the citizens of Santiago almost exclusively, soldiers of both armies

being cared for in the military hospitals. For nearly two years no addition to hospital equipments had been made, and there was a dearth of almost everything needed in caring for the sick. Suitable nutriment and medicines in adequate quantities could not be procured. Every ward was overcrowded and patients lay upon the floors and in the corridors. The withdrawal of the Sisters of Charity, who had been for years the managers of the institution, necessarily vastly exaggerated this dreadful condition. But through the assistance of Mr. Bravo and other Cuban citizens, and by the earnest cooperation of General Wood, the conditions were much relieved. A Spanish medical staff was provided, apothecaries engaged, three members of the Little Sisters of the Poor secured as directing nurses, and assistant nurses, orderlies, laborers, etc., were obtained on reasonable terms, and the machinery of the hospital set in order.

I have already reported verbally to you the condition and wants of this municipal hospital as they were at the time of my arrival home on the 23d of September last; and I had the pleasure of hearing you at once dictate a telegraphic order to the commandant at Santiago to use all available means required for the comfort and restoration of the unfortunate sick in that institution. I continued the duties of general inspector of the hospital for more than two weeks, when it seemed to me that my special services were no longer required, and that I might be released for other duties.

While engaged in the civil hospital, and thereafter, I took occasion to visit our sick soldiers in various hospitals, especially in the general field hospital, where I administered consolation to the sick and conducted religious service. Similar duties were performed on the four transports on which I sailed, and on one Sabbath worship was conducted in the Municipal Palace by permission of Generals Lawton and Wood, in the presence of a large number of officers and others who were present. My opportunity to perform such clerical duties was, however, much abridged by the duties to which I was called by the order assigning me to the care of the sick in the municipal hospital, which employed all my time and required all my physical energies for more than half the period of my stay.

On the return voyages, during two trips made, I had an opportunity to render service to sick officers and men upon the several vessels. This service was especially valuable on the *Segurança* during my second voyage home. A number of convalescents and a half dozen very sick soldiers, chiefly from the yellow-fever hospital, were on this ship. The request of Surgeon-Major Banister, of the Regular Army, to be allowed a money commutation for the care of these men was not granted, and they were put aboard with the ordinary travel rations together with the ordinary canned soups, etc. These were unfit for men in their condition. Moreover, most of the men were unable to prepare their own rations, and even some of those who were in good health when they embarked were seized with the calentura or Cuban fever when a day or two out of port. Furthermore, a case of malignant yellow fever developed on shipboard. Under these circumstances I agreed with Major Banister in arranging a hospital service for the sick in which the steward's crew would take a part, and become responsible for the money necessary to provide nourishment suitable for men so ill that they could scarcely lift their heads from the pillow. This was done, and such sick diet as boiled eggs, tea and toast, fresh-meat broths, hot milk, milk punches, mutton chops, etc., were provided during the entire voyage. I was assured by the surgeon in charge, Major Banister, and Acting Assistant Surgeon Newkirk, who was on board, that this arrangement saved the lives of several of the men, and thus fulfilled for them and their friends the hope of meeting on their native land. Instead of burying a half dozen men at sea, as was anticipated, we brought all our invalids safely to shore, and with the exception of the yellow-fever patient who died shortly after being landed in New York, they are all now (as far as I know) in good health and at their respective barracks or homes. The entire cost of this service was only \$225, which was paid by me out of a fund provided by a benevolent gentleman of my congregation.

III.—LOCATING AND PRESERVING THE GRAVES OF FALLEN HEROES.

Although not directly expressed in the order assigning me to duty, it was understood from verbal instructions received from you personally that the work of locating and designating the graves of our fallen heroes was a part of the service expected of me. This was in accordance with the general order of the President, dated August 6, 1898.* When reporting to General Shafter I called his attention to this order, and stated the wishes of the President and of the Secretary of War, that attention should be given thereto. General Shafter, while treating me with courtesy, declined to render any assistance in this matter, on the grounds that the energies of the army were occupied in the care of the living, as the Fifth Army Corps was then being removed from its camps at Santiago to Montauk Point. It was his opinion that the dead could wait until later in the season for such offices as fidelity to their memory might require. While bowing to this decision, I intimated that nevertheless I would feel bound to make at least preliminary investigations, which I would conduct at my own expense without calling upon the headquarters for help of any sort. This I did, and the results have been laid before you informally in my portfolio of drawings, rough notes, etc. I would add that after the departure of General Shafter, General Lawton regarded this part of my work with great sympathy, and offered any assistance in the way of transportation that might be necessary.

The general order of August 6 relating to the care of graves of fallen soldiers appears to have had no direct attention except at the headquarters of General Bates. Lieutenant Reeves, of his staff, constructed a map covering the immediate vicinity of San Juan hill, locating a number of graves thereon. This map was of great assistance, and had similar work been performed over the entire field at the same period all of the graves of the fallen would have been located without any difficulty.

In the course of this service I located 415 graves at Guantanamo Bay, El Caney, San Juan, and the suburbs of Santiago. Most of these had been marked by their comrades in such a way as to make identification easy. In some cases the humble markers, necessarily made of sticks, bits of timber, portions of ammunition and cartridge boxes, etc., had been broken down, and these I restored. I kept a careful list and description of the graves, and took photographic views and made drawings of a large number, supposing that any report to be made would be more valuable by the introduction of such illustrations. My portfolio contains 114 sketches and photographs of graves, 16 maps and charts of cemeteries, etc., besides numerous views of the localities.

Before my plans had been completed, Mr. D. H. Rhodes arrived from Washington with orders from the Quartermasters' Department to locate and mark the graves of buried officers and men on the battlefields of Santiago de Cuba. He brought with him competent assistants and 800 wooden headboards. I had made arrangements with Captain Gonzales, of the quartermaster's department at Santiago, to attend to this duty, but of course considered that the arrival of Mr. Rhodes upon the field relieved both that officer and myself from further responsibility. I placed at his disposal the information I had gained, and gave such aid in the preparation for his work as was in my power. It was soon manifest that a more thoroughly efficient man for the work to which he was assigned could not possibly have been found. He entered upon his duties with a fidelity,

* EXECUTIVE MANSION, Washington, D. C., August 6, 1896.

Ordered, That the graves of our soldiers at Santiago shall be permanently marked. The present marking will last but a short time, and before its effacement occurs suitable and permanent markers should be put up.

The Secretary of War is charged with the execution of this order.

WILLIAM MCKINLEY.

zeal, and intelligence that promised the best results. The difficulties before him were very great. The condition of the roads, the character of the climate, the risk of exposure to various forms of disease, the vexing obstructions of tropical plants that had to be penetrated, the rivers and streams to be crossed without bridges, and the fact that the graves were widely scattered and often overgrown by wild vines which made their recognition difficult and sometimes impossible, and the further fact that no information could be obtained as to their location, inasmuch as their comrades had already left the field for America, all presented a series of difficulties which can be appreciated fully only by one who has faced them. The highest credit is due to Mr. Rhodes for the valuable service which he has thus rendered the Government and the friends of the dead in preserving the memories of our fallen heroes. A considerable portion of his work traversed the field over which I had already gone. But parts which I did not visit were visited by him, and when arrested in my work by fever I left Santiago with the conviction that everything possible to be done would be accomplished.

RECOMMENDATIONS AND SUGGESTIONS.

1. *Printing and distributing lists of graves.*—Since my return, inasmuch as the public press gave some intimation of the character of my work, I have received from various quarters of the country inquiries from friends of our dead heroes concerning the condition and location of their graves. I have written many letters and have been able in most cases to give inquirers the satisfaction of knowing that the last resting place of their loved ones is known. I have also furnished copies of sketches and photographs of graves, which have been most gratefully received. These facts show the deep and tender interest felt by friends and by the public in the matter, and justify me in recommending that the report of Mr. Rhodes be printed, and that a copy be sent to the nearest friends of those whose names appear therein. Doubtless reproductions of photographs and sketches that would illustrate the peculiar manner in which our soldiers honored and preserved the memory of their fallen comrades would greatly add to the value of such a list, were there funds available for such a purpose.

2. *Providing convenient grave markers.*—After careful consideration of the subject and conversation with many officers and others, I venture to suggest that action should be taken by the War Department or by Congress to organize and engraft upon some branch of the Army the service of marking the graves of the dead, particularly on the battlefield and in field hospitals. In the civil war this duty was largely left to chaplains, as well as the duty of communicating with friends the details of death and burial. I believe there is no regulation specifically assigning this duty to chaplains, and, if it were so, those officers are an uncertain quantity in our regular military service, since our system assigns them to posts rather than to regiments, as in the volunteer service. I am inclined to recommend that this duty be laid upon the Medical Department, and that it be made obligatory upon surgeons to detail members of the Hospital Corps to the special work of gathering the details concerning the dead and mortally wounded, and of marking distinctly the graves of the buried. To this end I would suggest that a part of the outfit of a hospital corps be a portable grave marker. I have the honor here to submit a model of a plan which has occurred to me. This could be readily carried as a regular item of hospital equipments, and tablets at least could be easily taken into the field. The wire rod to which the tablet is attached is not absolutely necessary, as it can be fastened to a forked stick or some similar object. The rod, however, in ordinary cases could be taken. The model which accompanies this report can, no doubt, be improved and made more practicable for service by some one in the Medical or Quartermaster's departments. Had some such system as the above been in use there would have been no unknown graves on the

fields of Santiago de Cuba, and no distressed friends who add to the sorrow of the loss of loved ones the bitterness of ignorance concerning their places of burial.

3. *Sectional burial boxes recommended.*—That those who fell upon the field of battle should have been buried without coffins, even of the rudest sort, was an ordinary and necessary result of war. That some of those who died in the hospitals should have been buried in the same way was perhaps also inevitable. But it seems to me that it should have been made possible that those who died in the hospitals a month or more after the fighting had ceased could be buried in the ordinary way of civilized men. Yet, with the exception of those who died at the nautical hospital (as it was called) established in the boat clubhouse on the edge of the harbor, all our dead everywhere around Santiago were buried in the clothes in which they died, wrapped about in only a sheet or a blanket. During the same period many of the people of Santiago were burying their dead in coffins; and only the humblest poor, and those who were carried in the dead cart from the civil hospital, were buried uncoffined or were burned. Yet soldiers were buried uncoffined. Admitting that circumstances justified such facts, and that they are to be excused on the ground that no provision had been made by Congress or other authority, it will certainly commend itself to the war administration that arrangements should at once be made by which no such conditions shall obtain in the future, in peace or in war, in our new possessions or elsewhere. Captain Gonzales, of the Quartermaster's Department (and possibly his predecessor, though I do not know that), when applied to by the authorities of the nautical hospital, furnished coffins for burial, a duty which belongs to the Quartermaster's Department. No doubt he would have done the same for the authorities of the field hospitals established just outside the city. But apparently there was no one whose duty it was to attend to this matter, and therefore it was neglected. It seems a gruesome thing to suggest or to arrange for, and yet as sickness and death are inevitable, and burial must follow death, there is no reason why the same foresight that provides for other contingencies should not also provide for this, and the Quartermaster's Department of the Government be directed to prepare and distribute sectional parts of coffins or burial boxes that can easily and quickly be put together. Regard for the feelings of the friends of soldiers and the respect which is commonly accorded the dead should lead to some such provision, and I respectfully commend the consideration of the same to your attention.

4. *Early decision as to removal or reburial.*—It is further recommended that the question of removal or reburial of the nation's dead be decided at the earliest possible period. The reasons for this are urgent.

In the first place, the sites of burial are personal property. Our soldiers were entombed where they fell upon the plantations and grounds of individuals who, for the most part, are Spaniards or citizens of Cuba. There is nothing except their own sense of propriety and humanity to restrain these individuals from removing all external marks of interment, or, indeed, from desecrating the bodies of the slain by removal or otherwise. It is hoped and believed that few, if any, persons would be inclined to such conduct, but our Government should not be put to any such risk.

Moreover, many of these graves are scattered in secluded spots in the midst of fields or on hill slopes, where they are likely to be lost to sight. The tropical growth of Cuba is so rank and rapid that in less than two months after burial I found some graves so overrun thereby that they were almost hidden from sight, and doubtless some have been left unmarked for this reason. If left to the unchecked forces and course of nature for another year, even with the headboards which the War Office has erected, it is to be feared that the burial places will be wholly overgrown.

One must also count upon the tendency of thoughtless or irreverent persons to

remove marks; upon the action of wandering domestic animals and wild burrowing animals; and upon the agency of high waters and tropical floods. All these are elements of disintegration and destruction which are so much more active in tropical countries than in our own temperate land that they are certain to hinder greatly and possibly to prevent carrying out the benevolent purpose to remove or reinter the remains should action thereon be long delayed.

5. *Final disposal of the dead*—*A national cemetery at San Juan.*—It is in place to suggest the early consideration and decision of the question whether our fallen soldiers, sailors, and marines shall be removed from Cuban soil for reburial in their native land or be reinterred in a national cemetery, to be established in the vicinity of Santiago or elsewhere. Should the first course be decided upon I have no recommendation to make, as the successful carrying out of the nation's will would be merely a question of money, method, and sanitary expediency. No doubt most of the families and kindred of the slain would prefer to have their dead buried at home or in some national cemetery in the United States, especially if this is to be done at the nation's expense. Some would prefer to have their friends buried where they fell, and some, perhaps, have no decided preference in the matter. A few may have no near kindred who are deeply concerned about the disposal of the dead one way or another.

Should a Cuban cemetery be decided upon it would, of course, be necessary to purchase the property and by treaty stipulations place it forever under the jurisdiction of the United States. I think there will be but one decision as to the place most suitable for such an American cemetery on Cuban soil. I would designate San Juan Hill and the plain surrounding it as the place best suited for such a purpose. It is near enough to the city of Santiago to be convenient for all necessary purposes of watch and care, and also for the convenience of American tourists and others who might wish to visit the ground. It is a spot of permanent historic interest and will always be associated with the heroic actions of our soldiery, both of the living and the dead. There is enough high ground to contain all our dead and to leave ample provision for an American cemetery, which will certainly be needed in the future as it is now. The surrounding plain, as far at least as the Aguadores River and the famous Sunken Road, should also be included within the cemetery bounds, as well as that portion of the battlefield known as "Kettle Hill." The soil of this spot is dry and gravelly and well suited for burial purposes.

The spot is also far enough removed from the city to insure its purchase at a moderate price. In all respects this section seems to me to be the one most fitting for the establishment of a national burying ground. The large number of persons buried at Siboney, and also those interred at El Pozo and El Caney, could be removed without great difficulty and at a comparatively small expense. The only other suitable burying place for our soldiers in the province of Santiago de Cuba is on Marines Hill, at Guantanamo Bay. This place might also be preserved as a national cemetery and devoted especially to the Navy and to the garrison at Guantanamo City and vicinity, or the fifteen bodies there interred could be removed with little difficulty to San Juan.

I consulted a Santiago lawyer as to the ownership of this section and asked him to make some inquiries as to its value and the possibility of purchasing it, without revealing the source from which the suggestion for inquiries emanated. The unexpected sickness which compelled me to leave Cuba without completing all the plans I had formed prevented me from obtaining the desired information, and I have received no communication thereupon since my arrival home.

6. *Marking graves of fallen soldiers in European armies.*—I endeavored to learn the methods of marking the graves of fallen soldiers and sailors in vogue in European armies. The information obtained is interesting, but gives no suggestion of value in determining our own methods. It appears that in the armies of Great Britain and Germany, at least, the interment of the dead and the marking of the places of such interment are not governed by any definite regulations, but

are left to regimental or private enterprise. In this respect we are not behind, but rather in advance, of these nations. The direction of the President in his general order of August 6, 1898, and the prompt action of the Secretary of War on the same day in personally instructing and on the following day issuing an order to a detached army officer to make preliminary investigations, which was followed up by sending a special agent with competent aids to locate and plainly mark every grave, show an interest in this matter and a degree of sympathy which is not surpassed, and, indeed, not equaled by other governments. This fact, however, should not encourage content with our unorganized methods, but rather should incite us at once to take the lead of sister nations in abandoning haphazard ways and in adopting regulated methods.

In the army of Great Britain there is no rule laid down for marking graves of those who are killed in battle or who die in service. The regimental authorities do what they can, according to circumstances, and when possible the staff authorities organize a proper graveyard. The various quartermasters, as in our own Army, are expected to attend to the duty of burial. The public sentiment of the army, however, insures for the most part reverent and proper burial. At Omdurman the site of a cemetery was selected by the division staff and direction was given to dig the graves of the dead close to one another. This was done, and crosses were erected regimentally. Subsequently a wall was built around the cemetery under divisional arrangements, but all crosses were put up by the regiments themselves. A proposition has been made but not yet carried into effect to erect plain cast-iron gravestones, with the name and regiment of every man cast thereon in relief. In the Soudan, which is a Mohammedan country, the objection to cross markers is that the inhabitants would pull them up and destroy them from religious motives. On the contrary, it was suggested by General Lawton that all the headboards placed at the graves of our fallen soldiers in Cuba should be marked with a cross in order to make more certain respectful treatment through the popular reverence for that Christian symbol.

The system prevalent in the German army is to mark the graves with an iron cross, on which is cast in relief the sentence, "Hier ruhen täpferer krieges" (Here rests a brave warrior). No names are added except in a few cases, which are doubtless done by private enterprise. I am informed that the crosses are put up by patriotic societies called "Kreuger Verein" (soldiers' societies).

WAR DEPARTMENT, *Washington, August 7, 1898.*

My DEAR DR. MCCOOK:

The inclosed order for you to proceed to Santiago is, I think, all you will need after our conversation yesterday. After General Shafter sails with his command I trust you may be able to remain to carry on your good work.

Hoping good health may be vouchsafed to you, not doubting that God will bless you in your labors, I am,

Sincerely, yours,

R. A. ALGER.

Rev. HENRY C. MCCOOK, D. D.,
Philadelphia, Pa.

WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
Washington, August 7, 1898.

Rev. Henry C. McCook, D. D., chaplain Second Regiment Pennsylvania Volunteers, is hereby directed to proceed to Santiago, Cuba, on the steamship *Yale*, sailing from New York Tuesday, 9th instant, to report to Major-General Shafter,

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commanding, for such service among the sick in his command as he may be able to render; also for such other duties as may be assigned to him.

By order of the Secretary of War:

H. C. CORBIN, *Adjutant-General.*

HEADQUARTERS FIFTH ARMY CORPS,
Santiago de Cuba, August 17, 1898.

SIR: I have the honor to inform you the commanding general directs, agreeably to the instructions of the War Department of the 7th instant, assigning you to duty with the sick of this command, that you report to Chief Surgeon V. Havard for assignment to duty.

Very respectfully,

E. J. MCCLERNAND,
Assistant Adjutant-General.

Rev. HENRY C. MCCOOK, D. D.,

Chaplain Second Pennsylvania Volunteer Infantry.

ON BOARD THE SEGURANÇA, *September 20, 1898.*

Dr. H. C. MCCOOK, *U. S. S. Segurança.*

DEAR DOCTOR: As we are approaching "the parting of the ways" I wish to express to you, on the part of my patients and myself, our thanks for the assistance furnished on the voyage from Santiago de Cuba to Montauk Point, L. I., in the way of funds (\$200), which enabled me to provide the sick committed to my charge with proper and necessary diet. In my opinion lives were saved thereby, and men longing for home were enabled to see their hopes fulfilled. I also desire to express my appreciation of other help, in your ministerial capacity, which can not be expressed in commercial values, but only in the words of Goldsmith:

"Truth from his lips prevailed with double sway,
And fools who came to scoff remained to pray."

Very truly,

W. B. BANISTER,
*Major and Brigade Surgeon, United States Volunteers,
Commanding U. S. S. Segurança.*

TESTIMONY OF BRIG. GEN. MARSHALL I. LUDINGTON.

WASHINGTON, *December 16, 1898.*

Brig. Gen. MARSHALL I. LUDINGTON then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By General BEAVER:

Q. Will you please give us your name and rank?

A. Marshall I. Ludington; brigadier-general and Quartermaster-General.

Q. When did you become the Quartermaster-General of the Army?

A. About the 7th or 10th of February—about that time.

Q. So that you have been at the head of the Department during the entire time of the war with Spain?

A. Yes, sir.

Q. When did you first have any intimation of the probability of trouble with Spain?

A. Well, sir, from the newspapers, along about March, perhaps.

Q. Had you any official intimation of it, or any intimation that it would be desirable to prepare for it before the declaration of war?

A. I frequently spoke to the Secretary of War about it, and that possibly I ought to be doing something, and did it as far as we could with our money.

Q. To what extent was your Department furnished with funds from the national-defense fund?

A. I think we first got \$500,000, and then we got a million.

Q. Can you give us the dates?

A. I think we got the \$500,000 along early in April, and I think the other on about the 20th of April. The first money we got, General Beaver—that is, \$500,000—was for specific purposes, for the transportation of heavy ordnance, which was being shipped at that time to the seacoast. We did not have money enough of our appropriation.

Q. Did you have any funds—any considerable amount of funds on hand—under previous appropriations available for use in the general preparation?

A. No, sir; we had some, of course, some left of the balance of a previous appropriation.

Q. Any considerable amount?

A. No, sir.

Q. Did you make any contracts for material, for clothing, or for tents, or anything of that sort prior to the declaration of war?

A. When I first came to take charge of the office, the stock on hand I soon found was very low and I took steps at once to strengthen it, and I bought considerable clothing, and went on manufacturing. You know at that time, previous to this war, we did all our own manufacturing, made all of our tents and garments, with the exception of undershirts. We made them at our own arsenals and I pushed forward that work as much as I could, so that by the end of April, or along about the middle of April, we had a pretty good stock.

Q. To what extent and by how many establishments was kersey manufactured?

A. I am not prepared to state just how many—very few.

Q. Is it in use in ordinary-made garments and to any large extent?

A. No, sir; it is only used by the National Guard and by the Army.

Q. And none of it is used except by the military?

A. No, sir.

Q. So that there would naturally be no great stock on hand in the market?

A. I could not find any; that is, I could not find over a few thousand yards.

Q. To what extent was the standard cotton duck used in the manufacture of tents on hand and at the outbreak of the war?

A. Do you mean in the rush?

Q. I mean in the market.

A. Well, as soon as the trouble became very probable, or, at all events, when the war was declared, I sent around to different dealers and bought all the duck I could buy, and I don't think that exceeded over 200,000 yards; that is, to the best of my recollection.

Q. In general terms, of course, that is what we expect to get from you?

A. Yes, sir.

Q. Did the manufacturers anticipate trouble to any extent and begin to manufacture all these things?

A. I do not think so. They kept on hand a large stock of what is merchantable duck in the general market. You can get that, but our duck is made up from specifications, and, of course, they don't keep any very large quantity of it on hand.

Q. It is rather a better quality than what is made for the general market?

A. Better duck.

Q. Do you manufacture in your department either the camp and garrison equipage, such as camp kettles, utensils, etc., or did you buy them in the market?

A. We bought these articles in the market. We had a pretty good stock of mess pans on hand; in fact, had them on hand from the civil war. We took the cases out every year or two and looked them over.

Q. What were the difficulties, then, the chief difficulties, in preparing for the equipment of the troops with quartermaster's supplies, clothing and camp and garrison equipage, etc.?

A. The chief difficulties were in getting tentage and our uniform clothing. We could get flannel—blue flannel—that would answer for blouses. It was not what it ought to have been. We could get the blue flannel, but it was not suitable for the purpose required.

Q. When you say it was not what it ought to have been, do you mean as to quality?

A. Perhaps both as to quality and dye, because our goods are of indigo and the goods in the market alizarin or other dye.

By General DODGE:

Q. We saw the effect of that, particularly in Florida; there would be a purple, and a green, and a blue coat.

A. I saw that same thing down at Jacksonville.

Q. That was due to the fact that you were compelled to take just such dyes as were found in the market?

A. We had to take just what we could get.

Q. How long did it require to secure the standard goods for the manufacture of clothing?

A. Well, we entered into a contract at once, but it took considerable time. We did not have deliveries for a month from that time, when they began to come in.

Q. Had you a sufficient force, or were you able to assemble a sufficient force, in the arsenals owned by the Government for the manufacture of these materials?

A. No, sir.

Q. How was that done—by contracts?

A. Yes; in New York and elsewhere.

Q. The contracts for the furnishing of the finished article—overcoats, blouses, or anything which might be needed?

A. Yes, sir.

Q. How soon, General, were you able to meet the demand for tents?

A. Well, we met the demand right along as best we could. We at once began to push forward especially the manufacture of shelter tents, because that was the equipment for an army in the field, and up to the time that Santiago fell we were equipping the Army as far as possible on the basis of field operations. Hence we wanted to have everything ready for such operations, but we pushed the tent manufacture everywhere almost in this country, making tents in New York, Philadelphia, Baltimore, Toledo, Chicago, Detroit, St. Louis, and New Orleans.

Q. Is the material out of which shelter tents are made—must that be manufactured?

A. Yes, we have a specification for that, but we got as much of it as we could, and we took as much of other suitable kinds as we could get. There seemed to be a good deal of trouble in getting suitable material.

Q. It is heavier, of course, than anything that is called muslin, but not so heavy as canvas.

A. The point was to get an article that would shed water, and you have to get a very closely woven duck or drill to do that.

Q. What is the standard material; is it drill, or plain white duck?

A. It is plain white duck, but we bought a great deal of drill, too. It is questionable which is the better.

Q. As to the hospital tents, what supply had you on hand at the outbreak of the war, and how soon were you able to meet the demands of the troops in the field for a full equipment in that respect?

A. Well, General Dodge, in my report that I made to you, in answer to your letter, I gave the number of tents. We did not have many, but there never was a time that I could not meet the demand for hospital tents that I know of, and I do not recollect a single application which was approved by the Surgeon-General which was not met by us. There might have been in the beginning, for a few days.

Q. The Army, in time of peace, especially, needs no hospital tents?

A. Yes, we have an allowance for that, so many to a company, and increasing proportionately as the number of companies increases; so many for one company, so many for two companies, so many for three companies, so many for four companies, and so on.

Q. When the troops were in garrison and at their posts, they did not need hospital tents, I suppose, as a general thing?

A. No, I expect not; but they are on hand always to go with them.

Q. In case of active operations?

A. Our regular troops are required and supposed to be equipped with everything.

Q. So that when the Regular Army took the field they should have had everything pertaining to a field hospital force, so far as your department was concerned?

A. They should have had, so far as my department is concerned, and they did have, and it was their own fault if they did not have it, but I think they did have it.

Q. How soon after the declaration of war, General, were you able to meet the demand of the army in the field for all the articles that are supplied by your department in a general way?

A. Do you mean wagons, General, and everything?

Q. Everything, yes, sir; everything that the Army needs for operations in the field.

A. Well, we began to purchase animals and wagons along in April as rapidly as we could. We had to have the wagons manufactured, and we corresponded with such firms as Studebaker, at South Bend.

Q. Just give us the difficulties which confronted you in that respect in regard to the wagons.

A. When the regular troops were ordered to Chickamauga, they were ordered to bring with them all the transportation they had at their posts and to leave nothing behind. It was not very much. For instance, Fort Sheridan had about twenty-five animals and eight or ten wagons. Some did not have more than two or three teams. They took these with them to Chickamauga and afterwards to Tampa. Then, General, we began to anticipate purchase before the war, along in March. I sent out to the principal manufacturers in the United States, such as Studebaker, to know what they could do in case they should be called upon. I got all the information I could, and had that information in the office, and I bought some few wagons that they had on hand. Then they made every effort possible to get out wagons as soon as they could make them, and as fast as they were delivered to us I sent them out to the troops.

Q. To what extent, then, if at all, General, did the manufacturers anticipate the probable demand?

A. I don't think they did at all, General. They may have kept some on hand instead of sending out to their agents, or augmented their stock of materials.

Q. So far as you know, then, General, they did nothing in anticipation of what might be, notwithstanding the notice which your inquiry would give them?

A. I should not think they did. I should not suppose they would, because there was no order.

Q. It was just a simple inquiry you made, I understand, as to the supplies these various people had on hand?

A. Yes, sir,

Q. To what extent were they able to supply the ordinary farm wagons for transportation purposes?

A. Well, as fast as they could make them for us.

Q. Were there many on hand—Milburn, for instance, Studebaker, and the Columbia Company, etc.?

A. Not many, and they were not exactly suited for our purposes, as, for instance, they did not have feed and tool boxes.

Q. The tires are not as broad in the ordinary farm wagons as you require?

A. We broadened the tires. The tires of the old army wagons are not very broad. Since commencement of the war we have broadened the tires and we have got a very much better wagon.

Q. Now, including transportation, clothing, camp and garrison equipage, transportation—that is to say, transportation of what would be expected to be furnished by your department—at what time were you able to meet all requisitions and demands made upon your department?

A. Well, sir, just as fast as we could. We took up the question of clothing, and as fast as we could manufacture it we did so and shipped it to the large distributing places, such as Chickamauga and Tampa, and shipped it there in bulk, but how soon they distributed it I can not answer.

Q. I want to get at the probable time it would require in this country, with an army in the condition in which ours was, to be suddenly called upon—to multiply that by ten—to equip an army of a quarter of a million of men. Now, with the condition in which you were placed on the 21st of April, how long, with the resources of the country at your command and with what you found in the market, how long a time do you think it was possible to equip an army of a quarter of a million of men?

A. Well, sir, I think we did so in about three and a half months.

Q. Could it have been done in less time, in your judgment, taking the conditions as they were at that period?

A. I don't think so.

Q. Then, your foresight in that respect was about as good as your hindsight?

A. I could have done better looking back, but taking the conditions as they existed then I don't think I could do better than I did, as I felt, I may add, that a soldier had some right in the matter of quality of clothing.

By General BEAVER:

Q. There was a very sad experience which taught us some things during the early part of the civil war.

A. The Army experienced very great hardships during the early part of the civil war.

Q. I don't know whether you will be quite ready to answer the question, General, but looking back from what you now know—because we are trying to get at not only what happened, but what could be for the time to come. Looking back over what you have gone through, with your present knowledge, what we would like to know is whether or not you could have improved upon the methods, the plans, and the execution of the plans, in equipping the army? Better think about it a little because it is hardly fair to take you offhand on such a question as that.

Colonel DENBY. We mean by that all the knowledge that you have got now.

General BEAVER. Making that available for the future?

A. So far as tentage is concerned, I now know just where to go to get it—it took time to find out and get people started. They had to start up with their machines and get their duck.

Q. Well, of course; but in about ten or fifteen years hence?

A. I expect it will be about the same.

By General DODGE:

Q. Taking the same conditions, if you were to start over again, looking backward, with your present knowledge, where could you improve?

A. With my present knowledge?

By Colonel DENBY:

Q. Did you make any serious mistakes?

A. I expect I made mistakes. I do not know of any serious mistakes being made. It is only human nature to make mistakes when first starting out.

Q. You could do it better now, with the present conditions?

A. Yes, sir.

Q. Then, you would not have the present conditions; you could not possibly have had them?

A. Channels that are started now might not be in existence twenty or thirty years from now. I think the way to improve is to keep a good stock on hand.

By General BEAVER:

Q. That depends on circumstances?

A. It is a very important thing.

Q. You would start in with larger stocks on hand?

A. Yes, sir.

Q. Was that possible without any large appropriations by Congress?

A. Not any large stock; but as explained to you, I found a very small stock on hand when I took charge. I did not know the reasons, but I suppose they were good reasons. I naturally did, as far as I could, the best I could.

Q. What are the staple articles in your department which do not deteriorate by lapse of time? Now take the matter of tents, do they deteriorate?

A. No, sir.

Q. Tents you could carry right along?

A. Yes, sir; right along.

Q. Are you able to carry woollens and keep them free from moths?

A. Yes, sir.

By General DODGE:

Q. Do they deteriorate?

A. No, sir; not for a time.

By General BEAVER:

Q. I suppose the thread would become to some extent rotten?

A. I suppose so, but we put up such goods carefully.

Q. So far as the deterioration of goods in woolen mills—the only problem would be that of moths?

A. I think so; but we have at our depots very little trouble on that account, but I don't think it would be well to pile them up for years and years.

By General DODGE:

Q. Suppose you had on hand, for instance, everything in your department that would supply 300,000 or 500,000 soldiers; now, then, to take out of that supply enough for 100,000 every year, and adding to it every year; now, is it safe in your department to hold that supply on hand?

A. I don't think it would be necessary to put in enough for 400,000 or 500,000.

Q. Pretty near. You ought to have ready enough to equip 500,000. It takes 100,000 now, and in case of war it probably would be 400,000 more?

A. Possibly.

Q. You think it safe to carry a supply for an army of 300,000 or 500,000 in store?

A. Without deteriorating?

Q. That is by seeing to it?

A. Yes, sir. Supposing you have a large army of 100,000 taking from it every year, that is virtually holding a supply for five years; but if we kept on hand all the time supplies for 300,000 that would be better.

Q. I want to arrive at the fact, how long do you think it would be safe without very much loss to the Government? Of course, with cooking utensils, they would not deteriorate except by rust?

A. Except by rust, that is all.

Q. Now, as to wagons and ambulances?

A. Yes.

Q. Can they be kept on hand to a considerable extent?

A. Yes; but I would not want to keep a very large number of those on hand for a great number of years.

Q. Would you not keep the stock instead of the wagons?

A. Yes, sir.

Q. Manufactured stock?

A. Yes, sir. The trouble we had in getting our wagons during this war at the beginning was that the manufacturers did not have the stock—our kind of material.

Q. Now, then, could you keep a stock of material?

A. Yes, sir.

Q. The longer it is kept the better it is, is it not?

A. Yes, sir, within a reasonable limit.

By General BEAVER:

Q. The better kind of it?

A. Yes, sir.

Q. Practically, then, the one thing you could not keep on hand was the animals with which your land transportation would be drawn?

A. We had very little trouble in getting the animals. We got these promptly.

By General DODGE:

Q. How about harness?

A. We got that made very quickly. The greatest delay we had was in the wagons.

By General BEAVER:

Q. The harness would deteriorate by keeping, I think.

A. Yes; I would not keep much harness.

Q. Now, I suppose your supplies were all purchased, or practically all of them purchased, under the rules established by law for making contracts?

A. To a great extent.

Q. Did the making of these contracts come under your personal supervision, or did you commit them to the various bureaus?

A. To the various officers.

Q. I think we have had them all here, and that they have testified as to the manner in which the contracts were made.

A. Gentlemen, the officers in my office did not execute the contracts; they were executed by the depot quartermasters.

Q. Were any contracts made within your knowledge that were not influenced exclusively by the good of the Government?

A. I do not know of any, sir; I have no reason to question it at all.

By Governor WOODBURY:

Q. That applies to ships and everything?

A. Yes, sir.

By General BEAVER:

Q. Have you any knowledge, or have you acquired any knowledge in any examination that you have made of contracts, of any ulterior cause which tended to the making of those contracts?

A. I have not. In the matter of the purchase of the ships, I had nothing to do with that, sir.

Q. That was Colonel Hecker's department. We had him here and examined him pretty fully in that behalf.

By Colonel DENBY:

Q. You have been asked whether these articles ought to be kept on hand or whether you could keep them on hand; would you propose to keep them on hand for an army of 500,000?

A. That would depend on circumstances. I don't think so.

Q. Do you believe we are ever going to have war?

A. Yes, unless human nature changes.

Q. Who have we got to fight, General?

A. I can not say; possibly fight among ourselves.

Q. I want to know whether, with your experience, you would recommend that such a large stock of war material be kept on hand?

A. I would not recommend such a large stock.

By General DODGE:

Q. Would you recommend for 300,000 if you had an army of 100,000?

A. I think it would be well to have enough to meet all emergencies.

By Governor WOODBURY:

Q. Would you want enough to meet the demands of our present Army two times or three times?

A. Two times or three times our Army would not have been anywhere too much.

By Colonel DENBY:

Q. I come back to the question whether you would recommend—we want all the information you can give us—whether you recommend the keeping on hand the stock of materials for 300,000?

A. Supposing we put it at 200,000.

Q. It is not enough. Suppose we take it at that, can you get along with that, considering the States are arming their troops?

A. Well, we find now—we depended a good deal on what the States were going to bring in, and we were very much disappointed that the troops were not equipped. With few exceptions the different State troops were not well equipped.

By General BEAVER:

Q. What is it due to particularly?

A. The troops were organized on the basis, generally, of 55 privates to a com-

pany and two battalions to a regiment—you almost double the number of men to a regiment, so that left about one-third of the regiment not uniformed.

Q. Is it desirable, General, in time of peace, to keep up your officers to the maximum strength, such as is required in the time of war?

A. That is a military question.

Q. Hardly fair to ask you that. Something has been said here about the number of officers looking toward the concentration of everything relating to food supplies in the hands of the Commissary Department; for instance, that the Commissary Department should furnish not only the food proper, but the utensils in which the food is to be cooked and the implements with which the soldier is to feed himself. Would that, in your opinion, tend to increased efficiency in the service?

A. From my standpoint, the Commissary Department should furnish the food.

Q. Alone?

A. Yes, sir.

Q. And that, as now organized, the Quartermaster's Department should furnish the outfit, cooking utensils, transportation, etc.?

A. We have always done so. I think we have done it well, and I see no good reason to change. We would have to turn over the appliances we have, and they would have to have storage for their dishes, etc.; and, moreover, we have experts to receive and inspect such stores. I do not see anything to be gained; it would simply be a change from one department to another.

Q. Will you give us your reasons, General, for the present condition of things, somewhat at length? What special reasons have you for saying that the Quartermaster's Department can arrange better for the making of the mess pans, camp kettle, Buzzacott ovens and the baking ovens for the field, and all the utensils for cooking the food, and the Commissary and Ordnance Departments making the knives, spoons, and meat cans, and the other appliances necessary for the soldier to eat his food—better than the Commissary Department?

A. I do not see any reason for dividing it up between the two departments. I do not know why we should.

By Governor WOODBURY:

Q. Why do you want to?

A. We are ready to do anything. We are glad to do all we can do, and have done it. We have no desire to dump it off on anyone else. I think that they would have to go through the same experience that we have in providing these things. They would have to have the same storehouses and all that sort of things that we have.

Q. Do you consider it any honor or privilege to do that, General?

A. No, sir.

By General DODGE:

Q. If they furnished food to the soldiers and had to furnish the articles for cooking and the implements that the soldiers use—meat cans, etc.—would it not avoid friction? They could not make any complaint then that the soldier, when he got his food, did not have something to eat it with. We found his regiment without utensils, while he had food. Or, as Colonel Weston said this morning, at Montauk they issued food, and when it came to giving them something to eat they had to go to the Ordnance Department; and the Secretary of War wired Flagler, but by that time a week had passed. If it had been his duty to have furnished those things, he would just have gone down and had them in twenty-four hours.

A. That is what I should have done.

Q. Well, but the commissary had no power to do that.

General BEAVER. I suppose it is a question that has been discussed a great deal.

By Colonel DENBY:

Q. General, suppose they had food all that time and no clothes, would it not be more important to have clothing than food?

A. I think a man could get along with a pair of old pants, but could not get along without food.

Q. Well, in transferring the whole commissary business to you and have no commissary, do you think it would be any gain in the service?

A. No, sir; because our officers, as a rule, know nothing about commissary stores, as to quality, etc.

Q. And the Commissary Department know nothing about horses and mules?

A. As a rule, I expect not.

By General DODGE:

Q. They don't ask transportation; they ask for what food the soldier needs.

A. Well now, right there, I hope you will do me and our department justice. We did our part in getting food to the soldiers. There has been no complaint about lack of food, except, perhaps, at San Juan. We took it at Chicago and New York, transported it by rail and water to Santiago, and packed it on our mules to the front. I claim the Quartermaster's Department is entitled to credit for getting food to the troops, because we took it from the purchasing depots of the Subsistence Department and put it in the hands of the troops everywhere. I do not think the Commissary Department could have done any better.

By General BEAVER:

Q. When was the furnishing of knives and forks and plates and spoons and cups transferred to the Ordnance Department, General?

A. You mean the field equipment?

General McCook. In 1875.

The WITNESS. Prior to about ten years ago no department furnished the soldiers in garrisons with such property as knives and spoons; they bought them themselves from company funds. About ten years ago the Quartermaster took up this subject and recommended that we buy those things, and we have been doing it ever since.

General BEAVER. Now, General Ludington, what improvement, looking back upon the operations of this war, do you think could be made in your department in the subdivision of these labors among the various bureaus? Do the bureaus of your department cover the subdivision of the labor in your department as fully as it can be done, in your judgment, for efficient work?

A. I do not believe, General, I get exactly the point.

Q. You have a bureau of transportation?

A. You mean in my office?

Q. In your office.

A. Yes, sir. We have the office divided up in different branches. We had four branches before the war, eight now.

Q. Well, now, what I want to get at is whether, in your judgment, there could be any further subdivision of the work of your office that would tend to increased efficiency.

A. I do not know of any, General. We have a good complement of officers, and our work is so divided that I don't think any one is overtaxed, except, of course, in war emergency.

By Colonel DENBY:

Q. Don't you think arrangements ought to be made now for a force at Porto Rico—a force of a few thousand men? Of course, a force at Cuba of perhaps more, and perhaps a company at Honolulu, which, I think, would be enough, and then a few thousand in the Philippines—don't you think the best arrangement

now would be to take those things there and attend to and arrange, and drop this thing about arranging for an army of 300,000 to 500,000? Is it not the present problem that ought to be solved by the Administration and Congress?

A. I think that the President and Congress alone can settle those questions. I do not see how we are going to get along with a few men in the Philippines under present conditions.

Q. You could get along, could you not, with an army of 25,000 men?

A. Of that I can not say.

Q. If you had to supply only an army of 25,000 men you could get along as you did before?

A. Certainly.

Q. Now, you have got 75,000 and expect to have 75,000 more to provide for. Is it not a problem, then, to arrange for those soldiers we have got to feed?

A. That is precisely what we are doing. We are providing to supply an army of 100,000, and we are keeping a stock heavy enough to do so. We have to make special depots. For instance, at Havana we have to have a stock; we have to have one at Santiago, Honolulu, Ponce, and San Juan, and for each of the large camps around in this country we have to have one.

Q. And it is, in your judgment, a fact that the Quartermaster's Department would do better than the Commissary Department, is it not?

A. I think so. I think so for this reason: That we have all the machinery; we know all about the rates, have expert accountants, railroad people who have learned their business. I do not see why there should be another department doing the same thing.

Q. What do you think of the idea that we have been considering—that there should be a combination of the Quartermaster's, Commissary, and a portion of the Ordnance Department; that they should furnish supplies and call it a supply department, and give the whole work of supplying the soldier and having the goods reach the soldier to what you call a "supply department?" Would that be an improvement?

A. I think this is an age of specialties. I do not and I don't think my officers know much about coffee, and I don't think the officers of the Ordnance Department do either.

Q. In this supply department you would have to have two heads, one quartermaster-general and one commissary-general, combined one into the other?

A. I believe, individually, that the best system is to have them separate.

By GOVERNOR WOODBURY:

Q. General Ludington, now you have, so far as wagons and camp outfits, etc., provided for an army of 250,000 men. A great many of these men have been mustered out, and more are to be mustered out until you have an army of 100,000 men. Now, how much of such material as I have mentioned have you on hand? How long will the materials that you have on hand last an army of 100,000 men without purchasing anything more? Without selling your wagons, now, how long will these things you have on hand last without purchasing any more?

A. That is a pretty hard question to answer. It depends upon the usage of the wagons, etc.; it ought to last a long time.

Q. How long do you think they would last for an army of 100,000 men—the wagons, say?

A. I think within a year, or say two.

Q. Yes, but you could not wear them out if you got new wagons. For even 100,000 men they ought to last more than a year or two?

A. Yes.

Q. And if you have enough for 250,000 men they ought to last a number of years?

A. Yes, sir.

By General BEAVER:

Q. Looking at the appropriation for merchandise, is it not, in your judgment, the time to provide for the future on the heels of a great emergency, when Congress will appreciate just what the Army needs?

A. Yes; I think so.

Q. Is it not one of the most difficult things in the world getting appropriations from Congress for an army in time of peace?

A. It has been; yes.

By General McCook:

Q. Going back to the first part of the examination, when you were first notified that the war was on how many men were you required to provide for?

A. I went to the Secretary, as I stated before, a number of times and asked him that same question. I do not know that I ought to say so officially, but he told me to arrange, as far as I could, for about 30,000 men—he did not know exactly the number.

Q. What did you do?

A. I went on that basis; before the war, you understand.

Q. How many days afterwards until there was a change in this?

A. I can not tell from recollection, there were so many changes.

Q. How much was this increased—this number to be called out?

A. Increased to 125,000.

Q. That was the next increase, was it?

A. No; I think after that to about 80,000, and then 125,000. I had no official information at all until the call for 125,000.

Q. Then you did not know what to do—what number of men to contract for?

A. No, sir.

Q. You went forward on those intimations?

A. I went forward, General, as far as I could. We did not have any money to lay in any large stock.

Q. You began to see whether you had got these things?

A. I went over my stock, found we had plenty of blankets—80,000 blankets—on hand.

By General DODGE:

Q. You commenced to see where you could get these things?

A. Where I could get them and manufacture them, etc., and counted up my stock.

By Governor WOODBURY:

Q. I don't like to have General Ludington's testimony misunderstood. On the day that the war was declared the President called for 125,000 volunteers—the day that the war was declared, it says in the Adjutant-General's report. Did you have this intimation about the number of men—30,000 and 80,000—before the declaration of war?

A. Yes; no one seemed to know what the strength of the army to be called out might be. I could not find out; the Adjutant-General could not tell me.

By General BEAVER:

Q. Don't you think, before an officer should either be transferred or appointed by the Quartermaster's Department, he ought to have a business examination?

A. I do, sir.

By Colonel DENBY:

Q. You think that is an absolute necessity?

A. I do.

Q. How do you make quartermasters now?

A. I do not have anything to do with making them.

Q. Who makes them?

A. They are appointed by the President.

Q. Don't you detail a lieutenant?

A. Sir?

Q. Captain, or some one to act as assisting quartermaster?

A. We do at their posts.

Q. We have a quartermaster here, Colonel Jones?

A. He is a regular quartermaster.

Q. What I want to find out is, do you have a regular corps of quartermasters?

A. Yes, sir; as long as they stay in the Army.

Q. Do you detail them?

A. No, sir.

Q. A man who is once a quartermaster is always a quartermaster?

A. Yes, sir.

Q. Do you think this is a good system?

A. Yes.

Q. These gentlemen who graduated at West Point; are they appointed quartermasters, or how do you get them?

A. They are appointed under the existing law; they must be taken from the line of the Army.

Q. When a man once gets in the Quartermaster's Department he stays there?

A. Yes.

Q. While there, learns his duties after he gets in?

A. He might have been a very good quartermaster at a post previously.

Q. Do you know, General, what the custom is in the European armies?

A. I am not familiar with all the armies.

Q. We have had a good deal of talk about European armies—we have met nobody who can tell us exactly about them. I think this information we should all be glad to have as to the supply department.

A. I am sorry to say I can not inform you.

Q. We have been told here that the quartermaster of the English army controls the commissary department. Do you know anything about that?

A. I am not able to tell you.

Q. We could learn something from the experience of other nations if we had it?

A. Yes.

By Dr. CONNER:

Q. General, there has been a very widespread complaint of medicines, supplies of medicines, hospital stores, and hospital furniture reaching the various points to which they were sent from the supply depots only after the lapse of a good deal of time, and sometimes did not get there at all. Were these facts reported to you as Quartermaster-General?

A. No, sir; except in individual cases. Possibly the Surgeon-General may have come to me and said that some shipments may not have reached their destination.

Q. Were you in any way aware of the fact that these delays were existing almost constantly and almost everywhere?

A. I don't think they existed, because they were sent as rapidly as possible. Of course there are delays in transportation which the Quartermaster's Department can not control.

Q. In your judgment, ought it to take not one day, or two days, or three days, it may be, but as many weeks to send supplies from New York City to Camp Alger, for example?

A. No, sir.

Q. Or from St. Louis to Camp Thomas?

A. It ought not to unless there was a congestion on the road.

Q. Now, as respects the Quartermaster's Department, if it was able to deliver at once, subsistence department supplies, why was it not able with equal promptness to deliver medical supplies?

A. It was.

Q. Is it your judgment that medical supplies were transported as rapidly—as soon?

A. Yes; and sooner if we had known that they were wanted. I would say that I have sent a great many supplies and also equipments of hospital tents by express. I would get a telegram to send 50 tents by express, and at once ordered them by telegraph; and no matter of urgency was brought to my attention that I did not take up at the time.

Q. What I was trying to find out was, if a delay would occur in transportation, such delay was officially called to the attention of the chief of the bureau, because some men along the line had frequently complained that delays had occurred, and the explanation that we have had was that we turned the goods over to the transportation department (Quartermaster's Department) and that was the only department to answer the question?

A. There certainly was no discrimination against the medical or any department.

Q. Now, what is the rule of the department—I don't suppose it is the law—with reference to notification when goods are received? If, for example, a shipment is made to-day from St. Louis to any given point, when these goods arrive there, is that medical officer advised or are the goods delivered by the Quartermaster's Department to him?

A. The latter course is the general one, but in the rush that we have had in this war, where things were being shipped by carloads and trains of cars almost, it was impossible to do anything of that kind.

Q. In an emergency like that—in a rush, would the medical officer have to hunt up his own supplies and find out whether they were received or not?

A. He would not; but if I were he, and the supplies were needed, I would certainly find out about them.

Q. How could it happen under the existing regulations of the department that medical supplies sent from New York, say to Montauk, for example, were found after the camp was broken up, when they were covered by the odds and ends of the camp, not only medical but quartermaster's supplies never delivered and no notification?

A. I do not remember that that was the case.

Q. I will say to you that that was the case.

A. I do not know; I do not know why that should be. Dr. Brown knew all about it and the quartermaster too, and the supplies could not have been needed very badly or search would have been made for them.

Q. Yes; I wonder that more things were not lost sight of. The facts are that the medical supplies were a very long time in getting to the Point, and the supply officers say they are not responsible for it, but the Quartermaster's Department.

A. I think it would only be fair to have that shown up to see where and when they turned them over to us.

Q. It was not a single instance; it was chronic.

A. Do you mean at Montauk?

Q. All about everywhere—it is a cry from one end of the country to another. And why did the commissary supplies get there?

A. I expect the commissary looked after them.

Q. Was it necessary for the medical man when you notified him?

A. I have answered that question before. The quartermasters at a place like Chickamauga and Wikoff, or anywhere else, are busy men, not able to attend to the details which they could do in times of peace at posts.

Q. Has it been the practice of the Department to trace these missing articles, or the duty of the transportation companies?

A. No, sir; we start a tracer for them.

Q. We had one man testify before us about a hospital equipment for a 200-bed hospital; he was notified of the shipment from New York, and after waiting two months he never got them?

A. He could not have wanted them very badly. Did he report it officially?

Q. I do not know to what extent—he was expecting them every day—that was the reason—a 200-bed hospital was lost somewhere between Tampa and New York.

A. At Fernandina we had put down some water pipe, and I had an agent sent over to find out whether it was being taken up, etc., and when he got there he found a great lot of stuff belonging to the Medical Department—medicines, packages, etc.—they had gone off and left them.

Q. When was this?

A. Nearly four weeks ago.

Q. Wait long enough; all things come along to him who waits. Are not the medical supplies—a great many of them—shipped in less than car lots?

A. For these large camps I should think they would ship a carload; but they were shipped promptly.

Q. When they come in less than twenty days with medical supplies that is a good deal of time?

A. There was trouble in the shipment of medical supplies from the fact that they were sometimes shipped in less than carload lots and changed a great many times before they reached their destination, say, from New York to Camp Thomas, going quicker in carload lots; the same remarks apply to clothing.

Q. Now, what is the difference in time between shipping in less than car lots?

A. A material difference, depending, of course, upon the distance and number of changes that they have to make.

Q. Was it the custom of the Department to have the cars marked with the nature of the contents?

A. I instructed them, when I found cars were arriving without marks, to mark them.

Q. Do you remember about what time?

A. Doctor, that applies to carload lots; of course it could not apply to small shipments.

Q. Supposing all sorts of stores were packed together in a car, was it marked on the outside what they contained—that it was medical supplies?

A. I so instructed as soon as it was brought to my attention. Everybody was overworked, and we could not keep up with the invoices in ordinary hours, and I over and over again instructed them to work at nights and increase their forces, etc., if necessary, but the consignee would not then always get invoices in time, due in some cases to a congestion at the post-office, as happened at Tampa.

Q. About what time was the order given directing that the outside of the car should be marked with a list of the contents?

A. I don't recollect the date.

Q. Was it in the first, second, or third month?

A. I think it was called to my attention along about June.

Q. Were there very strong complaints made to you, as Quartermaster-General, that there was great delay in receipt of stores at all times at Camp Thomas?

A. I only know as far as stores for my department are concerned.

Q. You had the transportation of all of it, and it all came under your own knowledge?

A. My officers would say to me we want so much, hurry it forward; but I would not know about the medical supplies unless the matter was brought to my attention by the Surgeon-General.

Q. Did your various depot quartermasters report to you that that condition existed, or were they doing everything to prevent delays in the receipt of medical supplies?

A. As to medical supplies shipped, I do not know of any. It might have been so in one or two cases. I only say that I felt an interest in getting medical supplies forward above everything else, except food. That is the way I looked at it.

Q. Food, powder, and pills, in that order?

A. Yes.

By General BEAVER:

Q. Had you the loyal and hearty support from your superiors during the war?

A. As a rule, yes, sir; and I have no complaint to make whatever. Of course, they did not always carry out my recommendations; that was their prerogative.

Q. Were there any serious delays, resulting to the injury of the service, by lack of cooperation?

A. I can not say that there were.

Q. To what extent were the Department chiefs called into consultation with the Secretary of War prior to the declaration of war with Spain?

A. Well, I saw the Secretary of War frequently; I do not know that he called me in.

Q. Was there any assembling of the chiefs of Departments for consultation?

A. There were several meetings. I do not think all the chiefs, but a number of them—the Quartermaster-General and the Surgeon-General. I felt at liberty to go in at any time.

Q. The Secretary, I suppose, felt at liberty to send to you?

A. Certainly.

Q. Was there a collaboration of the work of the other Departments looking toward the result prior to the declaration of war?

A. Well, I can not say that I was there present in any meeting with all the chiefs of the Departments.

Q. Were the chiefs of the several Departments summoned by the Commanding General of the Army at any time for consultation in regard to the plans and the execution of the plans with a view to the war that was supposed to be imminent?

A. General Miles sent for me several times—perhaps a number of times—and I went frequently to General Miles voluntarily to talk over matters.

Q. But no meeting of the chiefs of the Departments?

A. No.

By General McCook:

Q. General, you have quite a number of officers. How have they, General, performed their duties?

A. We have some very good men and some very poor ones. I think, on the average, they have done very well. Of course they have not had any experience except for the past six months. They came in entirely inexperienced. I am speaking of persons appointed from civil life. Many of them would make good officers—they are good officers now. Some of them have turned out not to be so.

Q. You have a department of transportation over there now?

A. It is a branch of the office.

Q. Who is in charge of it?

A. Colonel Hecker.

Q. How has Colonel Hecker performed his duties?

A. Very well, indeed. He is a very energetic, efficient man.

Q. A very able business man?

A. Yes, sir; I so regard him. I have found him very efficient, very active, and very intelligent.

By General DODGE:

Q. These men that were brought into the service from civil appointment—they were all inexperienced, were they?

A. Most of them. There was one officer, I think, had been in the civil war who had some experience. You might say they were all inexperienced.

Q. Did they show a disposition, an ambition, to learn their business?

A. Some of them did.

Q. Can you give us a proportion who showed the desire to become efficient?

A. I should say fully one-half.

Q. And one-half did not?

A. Just moderately so.

Q. Those that were not efficient—have you reported them?

A. So far as I could, I have dropped them out.

Q. What is the condition of your corps now?

A. In that respect?

Q. Yes.

A. We have a very fairly equipped corps. We have not officers enough to go round, the demand has been so great in Cuba and all those different points—Cienfuegos, Havana, Matanzas, etc. We have some in the Philippines and Porto Rico. We have scarcely enough to go round.

Q. What proportion of your force now in the Quartermaster's Department doing quartermaster's duty is detailed from the line of the Army, the Regular Army, not regularly in the Quartermaster's Department?

A. Well, I think very small.

Q. Is there any large number detailed from the Volunteer Army; what proportion are there, or are there any?

A. Very few.

By General McCook:

Q. How are you going to quarter the troops in Cuba?

A. Well, at present we are sending over with each regiment of men hospital tents with floors. I am sending over cots also, the idea being to put six men in a hospital tent, each man to have a cot, and that is the recommendation for things to be sent over there. A board appointed by the Secretary of War recommended that course as the safest.

Q. Do you contemplate building barracks over there?

A. I presume if we stay there it will come to that. It has not been authorized. I think there has been one small building erected which will camp the troops there.

Q. Have you seen the plans of those barracks?

A. No; I have not seen the plans, General.

Q. What provision is being made for ventilation?

A. Ample, I think.

Q. You have traveled through Arizona?

A. The northern part.

Q. Down along the Southern Pacific?

A. No, sir.

Q. Do you know how they build their stations there?

A. Yes, sir.

Q. Do you know about what kind of roofs they put over them to get rid of the excessive heat?

A. I do not recollect. I have not been in southern Arizona. Do you mean that you put a double roof over?

Q. Yes, sir; that is a great blessing.

A. That is the method contemplated down there, because General Greene spoke of that feature, but I have not seen the plans.

By General DODGE:

Q. Who composed this board?

A. It was composed of an officer of each branch of the service, each bureau—Quartermaster's, Commissary, Engineer, Medical, Subsistence, and Ordnance.

Q. Do you know, General, how large a supply of hospital tents you had in June?

A. In June?

Q. Did you have hospital tents sufficient in the month of June to supply all demands; I mean in your depot?

A. Formerly I said I had no demands for hospital tents approved by the Surgeon-General that we did not supply.

Q. Did you not receive applications for hospital tents excepting through the Surgeon-General?

A. I would generally go and consult him about it. If I got a dispatch for hospital tents I would take it to the Surgeon-General.

Q. You took it to him?

A. Yes, sir; in almost every case.

By Dr. CONNER:

Q. Did he ever say that such a number of hospital tents were not needed?

A. In one instance, where Dr. Pope or Dr. Greenleaf telegraphed from Cuba for 1,000 hospital tents, I took it to the Surgeon-General, and he thought it was out of all reason, and that 500 would be plenty.

By Governor WOODBURY:

Q. Did you have anything to do with furnishing the transportation from Tampa to Cuba of General Shafter's expedition?

A. Yes, sir.

Q. From whom did you get the information as to the amount of transportation that would be wanted for that expedition?

A. First we were told to arrange for a force of 5,000 men—I think it was 5,000—to go over there on a sort of reconnoissance; that is, to go over and deliver food and arms to the Cubans, sailing from one place to another. Then afterwards it was increased to 25,000—it was some time between the two, that is to say, we began to get our transportation ready for 5,000 men, and then we began a week or so after that in getting ready for the 25,000.

Q. To whose judgment was it committed to say as to the number of transports and tugs and landing facilities that were required for that expedition; to yours?

A. Well, in a measure. We had nothing, of course, of our own to furnish; we had to go into the market and get what we could find.

Q. That is what I am getting around to. Please state whether or not you furnished all the transportation which you could obtain in the time you had to furnish it for that expedition.

A. All the transportation for the first expedition?

Q. The first expedition, of June 8—General Shafter's expedition.

A. The matter of detail in regard to how many men and animals, etc., to be provided for on the ships, of course I had to trust largely to Colonel Bird, who acted in connection with the Assistant Secretary of War in chartering the ships. I signed the papers; I am responsible for them, but the details of how many men were to go on each ship, how many animals, etc., I was not familiar with.

Q. What I want to know, General, is this: Whether or not all the transportation was furnished for that expedition that it was possible to furnish up to the time it left. That is to say, did you charter all the vessels, or purchase, that you could in the time that you had to do it in?

A. We chartered vessels for more men than actually went over—some 16,000 men—while we arranged for 25,000 men to go to the vicinity of Havana.

Q. The reason I ask that, General, is that we have testimony here saying that there was not transportation enough for 16,000 men, and even for the animals, to go on that expedition. There was not room for the ambulances or room for the mules and the men.

A. They left the mules and ambulances at Tampa.

Q. I understand that the ambulances were there, but they said there was no room for the mules on the transports, and that is what I want to know—whether you furnished all the transportation you could.

A. We furnished all the transportation we could under the circumstances. According to the reported capacity of the ships there seemed enough for the short trip originally proposed; but I suppose, Governor, there might be room for mistake by our people in their estimate as to the carrying capacity of the ships when they came to be loaded for the much longer trip to Santiago.

By General DODGE:

Q. Your order was to furnish transportation for not only 25,000 men, but the supplies and transportation that should accompany them, was it?

A. We were told to arrange transportation, not officially at all—altogether verbally. We understood that we were to furnish transportation for 25,000 men.

General BEAVER. He said very frankly perhaps we were mistaken. That would be a fair statement of a difference between results intended and what was accomplished.

General DODGE. General, what preparations are being made for furnishing these troops in the Southern climates, or in the hot climates, with the proper clothing? General Brooke, who was here, said that the troops in Porto Rico never had been furnished with the proper clothing for that climate.

A. Well, they went down there with duck suits, and we are now preparing to get a khaki suit—a good article.

Q. He said his men went down with the same clothes they wore here.

A. Well, we sent them down after that.

Q. They had canvas trousers, but were short of blouses?

A. General Brooke told me in a personal way he did not care about the blouses, but he wanted the trousers. I do not make this statement officially, of course.

Q. Has it been determined what is the proper suit?

A. No, sir; I would be glad to know what is the proper suit.

Q. What are you furnishing now to the troops in Cuba, Porto Rico, and the Philippines?

A. Gingham shirts for Manila and white duck suits.

Q. White?

A. Yes, sir.

Q. What kind of a hat?

A. We propose to give them a cork helmet. They can buy pith helmets out there, but I am told they won't stand any wetting. They have plenty of money out there to buy what they want, and I told them to buy suits at Manila.

Q. Do you know what the troops are clothed with out there now?

A. I expect they are clad very largely in white or unbleached trousers and blouses and gingham shirts and light-weight stockings.

Q. That they bought there?

A. No; we bought them in San Francisco and sent them out.

Q. What about troops going to Cuba; how are they clothed?

A. We furnish an unlined blouse. They were supplied originally with 16-ounce kersey trousers.

Q. What kind of a shirt?

A. Blue shirt.

Q. And an undershirt besides?

A. Yes.

Q. Do you receive any reports that their clothing is not suitable?

A. They ask that we send down lighter suits.

Q. Are you manufacturing these lighter suits?

A. We are manufacturing them now.

Q. What is the cloth that you are making these new suits of?

A. These new suits that we are making now are of a light canvas—light duck.

Q. Those go to Manila?

A. Yes, sir. I think myself—of course it is only my opinion—that it would be better for them to have something woolen rather than to be absolutely clad in cotton. The Navy Department requires their men to have woolen.

Q. Do you think that khaki is a cool suit?

A. I think a light-weight khaki would be; yes, sir.

Q. Do you have to obtain that from Europe or do you make it?

A. There is an effort being made to manufacture it here, and we are inviting bids for a number. We have this subject up now investigating it.

Q. Is there much difference in the cost between the European price and the American price?

A. Well, I think there is a considerable difference in the cost. I have not the figures before me.

By General McCook:

Q. Are the American prices cheaper?

A. I think the foreign are cheaper.

By General DODGE:

Q. Can you give us a statement of the average cost of the different classes of uniforms during this war?

A. I could not now.

Q. Would it be too much trouble to do it?

A. No, sir.

Statement showing the approximate average cost of the following specified articles of clothing and equipage.

Article.	Prior to war with Spain.	From May 1 to June 30, 1898.	From July 1 to Dec. 31, 1898.
Blouses:			
Lined	\$3.31	\$4.41	\$3.93
Unlined		3.48	3.12
D. B. flannel shirts	1.94	1.95	1.78
Trousers, heavy kersey:			
Foot	pair 2.32	2.75	2.63
Mounted	do 2.97	3.40	3.36
Trousers, light kersey:			
Foot	do		2.33
Mounted	do		2.93
Shoes, calfskin	do a 2.37	b 2.25	b 2.23
Drawers:			
Canton flannel	do .48	.48	.46
Summer	do	.29	.28
Undershirts:			
Summer .....	.31	.24	.25
Wool, light quality .....			.55
Wool, heavy quality .....	.38	.40	c .59
Tents:			
Common, complete	8.52	11.59	9.20
Conical wall, complete	23.54	28.23	27.36
Hospital, complete	36.94	48.53	40.47
Shelter, complete	3.11	3.97	3.11
Wall, complete	17.48	21.30	20.68
Overcoats:			
Heavy made	8.87	11.49	10.67
Light made			9.22

a Hand sewed.

b Machine sewed.

c Improved quality.

Respectfully submitted.

M. I. LUDINGTON,

Quartermaster-General U. S. Army.

QUARTERMASTER-GENERAL'S OFFICE. December 21, 1898.

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., January 10, 1899.

Respectfully forwarded to the president of the commission appointed by the President to investigate the conduct of the War Department, etc., Washington, D. C., in connection with my testimony before said commission on the within mentioned subject in answer to question asked by Dr. Conner, as quoted within.

M. I. LUDINGTON,
Quartermaster-General U. S. Army.

GENERAL DEPOT OF THE QUARTERMASTER'S DEPARTMENT,
ARMY BUILDING, WHITEHALL STREET,
New York City, January 4, 1899.

Gen. M. I. LUDINGTON,

Quartermaster-General U. S. Army, Washington, D. C.

SIR: Replying to the following query, "How could it happen under existing regulations of the Department that medical supplies sent from New York, say to Montauk, for example, were found, after camp was broken up, covered by odds and ends of the camp; not only medical but quartermaster's supplies never delivered, and no notifications?" I have the honor to state that I have no knowledge of any such conditions having existed at Montauk, and can not believe they did exist. The Medical Department had a very competent man—Dr. Winters—whose business it was to see to hauling up what was wanted at the several hospitals. He would come to the quartermaster's office and get the numbers of the cars containing medical supplies, and would have such as were needed hauled and leave the balance on cars until required, when they would also be taken where needed; they had their own teams allotted them, and thus controlled their deliveries themselves. After most of the patients were gone from the hospitals and several cars were still partially filled with hospital stores, the railway company desired the cars emptied. I had all these medical stores unloaded in the quartermaster's warehouse, where they remained, to the knowledge of the medical authorities, till shipped to Savannah, in October or November, with some 35 or 40 carloads of stores and furniture from the hospitals. The hospitals were at all times notified of the arrival of cars containing medical supplies, and had at all times a number of cars on track containing these goods; were well supplied with teams, and Dr. Winters was very active and energetic in hunting up and moving needed articles. I do not believe the condition indicated by the above question existed at Montauk.

Very respectfully,

J. N. PATTON,
Captain and Assistant Quartermaster, U. S. Volunteers.

WASHINGTON, D. C., December 16, 1898.

TESTIMONY OF BRIG. GEN. JOHN M. WILSON.

Brig. Gen. JOHN M. WILSON, Chief of Engineers, United States Army, having taken the oath before the commission, said:

I have been in the Army of the United States as officer and cadet since June, 1855; Chief of Engineers since the 1st day of February, 1897. My present duties are those of Chief of Engineers of the United States Army, which include supervising the charge of river and harbor improvements throughout the United States, the charge of the fortifications and the torpedo defenses of the United States; president of the Rock Creek Park commission; member of the Rock Creek Park board of control; member of the highway commission of the District of Columbia; the charge of such work at the mouth of the Mississippi River as

comes under the directions of the Secretary of War: supervising under the Secretary of War the position and location of bridges over navigable streams; supervising the charge of certain public buildings and grounds in the District of Columbia under the direction of the President of the United States; supervising the charge of the water supply of the District of Columbia.

By General BEAVER:

Q. And also a member of this commission?

A. Yes.

Q. General, to what extent had you funds available at the time of the declaration of the war with Spain for the erection of seacoast defenses and the arming of the defenses already erected on the Atlantic seacoast establishment?

A. When war was declared I had already asked the Secretary of War for funds, and my request was promptly approved and an allotment made from the emergency appropriation of \$50,000,000 appropriated by the act of March 9, 1898. I have received in all from that appropriation at various times the following:

Allotment of March 17, 1898, for guns and mortar batteries	\$2,725,000
Allotment of March 17, 1898, for torpedo defenses	250,000
Allotment of March 31, 1898, for emplacements for fourteen 4.72-inch rapid-fire guns	90,000
Allotment of March 31, 1898, for maritime purposes and torpedo service	60,000
Allotment of April 2, 1898, for temporary emplacement of old and new guns and contingencies	150,000
Allotment of April 2, 1898, for torpedo defenses of the country	1,115,000
Allotment of April 16, 1898, for temporary batteries, insulating, and ordnance, etc.	65,000
Allotment of April 21, 1898, for planting torpedoes	150,000
Allotment of April 21, 1898, for emplacements for eight 6-inch rapid-fire guns	50,000
Allotment of April 23, 1898, for emplacement for seventeen 12-inch and twenty-one 8-inch B. L. rifles on barbette mounts	932,000
Or a total of	5,622,000

In addition to the foregoing some minor sums were available, left over from old appropriations, but small in character.

Q. Aggregating about what amount?

A. In all, including the emergency allotment, I think, less than \$6,000,000.

Q. The amount, independently of the national-defense fund, aggregating how much?

A. I have not the figures before me. I can give you the amounts of appropriations in past years, as indicated in my annual report, if that will be of any use; but it is already a matter of record. I can give in a few words all that has been proposed up to this time for the defense of the country. It was intended to provide in all, for the defense, at thirty different localities, 2,260 guns. These localities were as follows: The Penobscot River, the Kennebec River, Portland, Me.; Portsmouth, N. H.; Boston, Mass.; New Bedford, Mass.; Narragansett Bay, Rhode Island; eastern entrance of Long Island Sound; eastern and southern entrance of New York Harbor; Delaware River; Baltimore, Md.; Washington, D. C.; Hampton Roads, Virginia; Wilmington, N. C.; Charleston, S. C.; Port Royal, S. C.; Savannah, Ga.; mouth of St. John's River, Florida; Key West, Fla.; Tampa, Fla.; Pensacola, Fla.; Mobile, Ala.; New Orleans, La.; Sabine Pass, Tex.; Galveston, Tex.; San Diego, Cal.; San Francisco, Cal.; mouth of the Columbia River, between Oregon and Washington; Puget Sound, Washington, and the lake regions of Lake Champlain.

The approved and adopted armament for our seacoast defense contemplate, heavy rifle guns, 8-inch, 10-inch, 12-inch, and 16-inch caliber; heavy rifle breech-loading mortars of 12-inch caliber; rapid-fire guns of 6-inch, 5-inch, 3-inch, and 6-pounders caliber. The total number of guns and mortars, including rapid-fire guns, projected for the harbors, for which plans have been contemplated, is 2,267.

Q. What points at which guns have been mounted, or at which work has been done with reference to the mounting of guns, are not protected by details of men to take care of them?

A. It occurred to me not long ago that probably you might ask me that question, and I prepared a schedule of them.

(Schedule was read, but it was of such an important nature that the commission decided that it was not necessary to appear on the records, because it contained information which it was not desirable should be made public.)

Q. Are there any points that you have mentioned where the Government has not a representative looking after the property?

A. No, sir; we always have either an ordnance sergeant or a civilian appointed as a watchman to look after the guns, wherever they may be. One man can not, of course, be at work night and day, and occasionally some damage occurs by some vandal, who comes in while the watchman is absent at meals or is asleep at night. In all these cases I do not hesitate to say that I have had the prompt assistance of the Adjutant-General of the Army wherever he had troops available. The small number of artillery troops in our service rendered it absolutely impossible to send skilled men everywhere, and at one important post I was informed there were not enough artillerymen to put one man to a gun in the batteries. Anticipating that I might be called before the military committee in a day or two, I have made an estimate of the men required to care for all these fortifications throughout the United States now building and yet to be built. The number, as I have it in minds for those already or that I hope to have completed at the end of this fiscal year is about 16,000 men, and to complete the entire system at least double that number will be required. The artillery troops should include a number of skilled mechanics. We are putting up electrical plants of great value, and we have machinery of all kinds in connection with the modern disappearing gun, particularly for the loading of these new batteries, in the handling of the engines, dynamos, and machinery of this character, and require men of mechanical ability greater than is usually found among the enlisted men of the Army.

Q. Is there any provision for these men in this army bill?

A. I have asked for them, and one electrician for each post and two mechanics for each company are named in the bill for the reorganization of the Army now before Congress.

By Captain HOWELL:

Q. How would it do for this commission to refer this report to that commission?

A. I beg your pardon—this is an entirely independent communication. Up to the present time the total amount appropriated by Congress for the construction of gun and mortar batteries had been \$15,324,333. In addition there was allotted by the President—from the appropriation for national defenses, act of March 9, 1898, for the construction of permanent guns and mortar batteries—the sum of \$3,845,144, making a total of \$19,169,477. The total estimate for the fortification, as made by my department, is \$55,000,000, and when at the close of this fiscal year we have finished the work under these appropriations, I anticipate that we will have practically completed more than one-third of the defenses of the country.

By General BEAVER:

Q. Have you any provision, General, for the training and education of these electrical engineers of whom you speak?

A. No, sir; other than that we have established at Willets Point, New York

Harbor, which we call the engineer school and torpedo depot. Under the law we are allowed 5 companies of engineers of 150 men each, making 750 men. Of these 5 companies one was a paper company. When war was declared, we only had 500 men, in 4 companies. Of these, 2 companies were sent to Cuba with General Shafter's army, and I was greatly gratified when the officer this morning—an officer of the Subsistence Department—spoke so highly of these troops and their officers. One company is in Manila. We had 160 men distributed about the country on torpedo defenses, laying cables, and putting in torpedoes. They had to be assisted by such civilians as we could employ, consisting of civil engineer telegraph operators, electricians, boatmen, and laborers, in putting down torpedo defenses, in every case an officer of the Corps of Engineers—sometimes two—being in charge of the construction of the fortifications and planting the torpedoes. I prepared in advance, as I think you gentlemen have heard, a letter, on the 3d of April, several days before war was declared, directing my officers to go ahead and make all preliminary arrangements, and putting every possible power in their hands, authorizing them to buy anywhere and everything that they wanted, and that I would endeavor to get the money from Congress for the payment of these things. They did so. They went ahead with energy and skill, and then, with what material we had on hand and what we afterwards bought, by the middle of June I felt perfectly satisfied that we could blow up any ship that attempted to enter any of the prominent seacoast harbors of the United States which I have mentioned.

Q. How much money had you available for doing that before the national defense fund became operative?

A. The total amount for the last fiscal year for torpedoes for harbor defenses was, I think, \$100,000, and the greater part of that had been expended before this time in the purchase of materials; but the promptness with which I received action in giving me money from this national defense fund saved me any amount of trouble. We bought a large amount of material in the way of cables, search-lights, dynamos, torpedoes, dynamite, and everything of that kind, and we purchased as rapidly as possible, inviting proposals when time admitted, and going into the market and buying them when we did not have time. There was some complaint made from those who did not get contracts, but we did not have time to look around. It was a period when it seemed to me that it was absolutely necessary for somebody to act quickly, and I did so, and would do it again.

Q. And you were sustained in it by your superiors?

A. I was, invariably; having been called several times to explain what I was doing by my superiors.

By Governor WOODBURY:

Q. From your experience that you have had from the beginning of the war, or from the period that you thought war was imminent, to the present time, looking back to what you have accomplished, please state whether or not more could not have been done in your department than was done or has been done.

A. I do not believe that more could have been done. I take no credit to myself, but give it to the splendid officers who gave me such prompt, loyal, and faithful assistance from the first until the last. I do not believe that if we had to do it over again it could have been done any better than it was with the men then at our command. We have made and instituted improvements, as men always find in the practical application of theory; but to start over again, with the exception of these minor matters that we have developed from time to time, I think we would have done exactly as we have already done.

By General DODGE:

Q. Have you got anything to suggest that we have not questioned you upon?

A. No, sir; other than I would like to add that in all the duties committed to

my charge I have had the prompt assistance and approval of those who were my superiors in office and the loyal assistance of those who were serving under my orders.

AFFIDAVIT SUBMITTED BY MAJ. SAMUEL D. HUBBARD.

NO. 143 WEST ONE HUNDRED AND THIRD STREET,
New York City, N. Y., December 14, 1898.

Hon. GRENVILLE M. DODGE, *President.*

DEAR SIR: In reply to your communication of December 6 I inclose affidavit in reference to case of Jacob Frank, quartermaster-sergeant, Ninth New York Volunteer Infantry, as desired.

I have no special information that I know that would be of benefit to the commission, but I have been so maliciously attacked in the press that I thought it incumbent upon myself to place my services at your disposal should you desire them.

Thanking you for your consideration, I am,

Respectfully,

SAMUEL D. HUBBARD,

Late Major and Surgeon, Ninth New York Volunteer Infantry.

STATE OF NEW YORK, *County of New York:*

I, Samuel D. Hubbard, major and surgeon of Ninth New York Volunteer Infantry, having been duly sworn according to law, depose and say that on the evening of August 23, 1898, as I was returning from a call on a sick officer, I was hailed by the chaplain of the Ninth New York Volunteer Infantry, Capt. Rowland S. Nichols, on Market street, in the city of Chattanooga, who informed me that "one of our men has been run over by the cars and is in a little yellow house down by the railroad and that there are a lot of doctors around and nothing is being done for him." This was about 7.55 p. m. I hastened to the place indicated, and found an injured man lying upon two tables placed end to end, with canvas stretched under him. The injured man was waving the bloody stump of his right forearm in the air, and that the left leg was hanging from side of table. There was a crowd in the room and the place dark. On my entrance I was recognized by the sergeant of the provost guard (Sergt. Charles J. Cornwall, Company M, First Missouri Volunteer Infantry), who informed me that the small group on left of patient were doctors for whom he had sent. One of the number spoke up, introducing himself as Dr. Baxter, the railroad surgeon. He then introduced two other physicians. I said, "I am the surgeon of the Ninth New York, and I am informed that the unfortunate is a member of my regiment." Dr. Baxter replied, "I believe so." I then asked what was being done, to which I received no reply, but the sergeant spoke and said some one gave him a hypodermic injection. Dr. Baxter then asked: "What would you have us do? The man will be dead in fifteen minutes, and I don't see the use of doing anything." I replied, "I would do all I could to make him easy and comfortable." Dr. Baxter replied, "He is unconscious and does not feel any pain." I then replied, "That may be so and it may not be, but from a general standpoint I would exclude outsiders, get all the fresh air available, cover his bleeding wounds, wrap him up, and see if the shock could not be lessened." This seemed to irritate Dr. Baxter considerably, and he hotly replied, "Take the case; he is yours, and do as you please with him." I endeavored to get a loan of a hypodermic syringe from Dr. Baxter, but he said he would need his. I then applied to another doctor standing near, and he kindly loaned the use of his.

The patient at this time was restless and moaning loudly, yelling occasionally loudly. I gave several hypodermic injections of morphine until he was quieted.

I asked Dr. Baxter if there was a hospital in the city to which he could be removed and an operation performed; that if he continued much longer with a tourniquet on arm and thigh that death was inevitable. He replied that there was no place in the city; that the county hospital was out some distance, several miles, and that the road was very rough. I then said to him, "I think it best to get him, in that case, to a park hospital."

I then asked Dr. Baxter to assist me in getting the patient transported from the Central Station to the other station, or, if it was possible, to have a car transport patient there, as that was the only means at present of saving his life. He said, "I will send a message to the hospital for you." I wrote a telegram to commanding officer of field hospital, Second Division, Third Corps. This was not delivered, but the captain (Company M, First Missouri) of the provost guard sent a message to the Sternberg Hospital. I asked Dr. Baxter for means to transport patient to station, inasmuch as we could not get a special train in time for 9 p. m. train. Dr. Baxter said, "I will get an ambulance and have it here in time." I sent a messenger to station requesting to have train held until I could arrive with patient; that we would be a few minutes late. When Dr. Baxter returned at 7 minutes to 9 and informed me that he could not get a conveyance in time, but that it would be there later, I hastily sent a messenger to stable near by for a wagon or dray, but at 9.07 a conveyance arrived from Sharpe's livery stable. Feeling the train would be held in response to my request, I had patient carefully removed. We arrived at station on Georgia avenue at 9.20 p. m., to find that train would not be held. I applied to Mr. Sharpe's stables for a room (knowing Mr Sharpe personally), and he gave me the rear office, furnishing a cot and mattress and covering, hot water, and had room heated. I sent messengers to drug stores for supplies, but could not get what was needed, only some gauze and a hot-water bottle. Drugs most urgently needed I had the greatest difficulty in getting, even though the messenger was accompanied with money and the necessary prescriptions (morphine and strychnine).

As I had no instruments and was unable to obtain any, even after the greatest effort, I considered the only thing to do was to keep the patient in present room, where he was kept comfortable, and if he did not fail much to remove him on the 11 p. m. train. While waiting the patient was easy, his skin warm and dry, and once he recovered consciousness sufficient to recognize me. When I was informed that the train was ready, 10.50 p. m., I took temperature, 98.5, and pulse, 83. Judging from my experience in like cases, I felt the only remaining thing to do was to try removal, as the longer the tourniquets stayed on the graver the danger, and they had already been applied over six hours. Accordingly he was transferred, bed and all, into the baggage car, and the train left on time. The patient stood the trip much better than I had expected, when all of a sudden he commenced to have difficulty in breathing, and just as we arrived at Lytle—11.31 p. m.—he died. An ambulance from Sternberg Hospital met train and transferred body to field hospital, Second Division, Third Corps.

From the best information that I could get from witnesses present, the patient was injured by accidentally running into a moving freight train as it crossed Market street, while he was skylarking with some companions. The cars cut off his right hand at the wrist joint and his left foot at ankle, and fractured left thigh at junction of middle and upper third (simple fracture), together with a cut over left eye, semicircular, extending about 3 inches in length. Upon reporting the facts to the regimental guard, I was informed that his name was Jacob Frank and that he was quartermaster-sergeant of Company B.

I used every endeavor that surgery knew to save this man, but was hampered in that I could get no assistance in the city and supplies. Transportation was even difficult.

I made a written statement of the affair, accompanied by affidavits from Ser-

geant Cornwall, Company M, First Missouri Volunteer Infantry, and Chaplain Nichols, Ninth New York Volunteer Infantry, and Corp. D. E. Helmick, Company M, First Missouri Volunteer Infantry, who were witnesses to my actions, to the Inspector-General, Third Corps, Col. Frank D. Baldwin.

SAMUEL D. HUBBARD,
Major and Surgeon, Late Ninth New York Volunteers.

Sworn to and subscribed before me this 14th day of December, 1898.

[SEAL.]

THEO. CLARKSON,
Notary Public for New York County, N. Y.

WASHINGTON, D. C., *December 17, 1898.*

TESTIMONY OF BRIG. GEN. G. NORMAN LIEBER.

Brig. Gen. G. NORMAN LIEBER then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By General BEAVER:

Q. General, will you kindly give us your full name, and rank and position in the Army?

A. G. Norman Lieber; brigadier-general, Judge-Advocate-General.

Q. Has your department, General, been organized for efficient and sufficient service during the war with Spain?

A. Not entirely; no.

Q. In what respect was there any deficiency, and why?

A. Well, the only addition to the regular department that was made in the legislation was to provide for judge-advocates of corps only, whereas there ought, perhaps, to have been judge-advocates for each division.

Q. Was the necessity for that outlined in advance to Congress?

A. It was not.

Q. Do you know why?

A. Well, the bill as originally introduced, and when it was on the floor of the House, contained no provision for judge-advocates at all. When I discovered that, I simply asked to have judge-advocates of corps appointed. I did not ask for judge-advocates of divisions. There were none during the war of the rebellion, and I did not know there would be absolute necessity for them, so I only asked for corps judge-advocates.

Q. Was the administration of military justice delayed in any way by that deficiency?

A. I do not think it resulted in delay.

Q. The difficulty, I suppose, was remedied by making details of officers from the line or field of regiments?

A. Yes, sir. The only difficulty was, I think, that probably the service was not quite so efficient as it might have been.

Q. Would it, in your opinion, be in the interest of the administration of justice, both as to celerity of the administration of the department and in the interest of the accused, by having judge-advocates of divisions?

A. Well, I think more efficient service would be to the interest of celerity and to the interest of the accused also.

Q. I suppose you recognize that it is in the interest of the accused to have quick justice?

A. Yes, sir; of course the judge-advocates of divisions would have to review the records as they come in.

Q. And experienced men on the staff of the divisions would, of course, leave fewer errors to be treated later on?

A. That is a fact.

Q. It is probably well to have on record, General, what, I suppose, is known to most of us, what the duties of the judge-advocate in the field are?

A. You mean the judge-advocate of a division, for example?

Q. Yes, sir.

A. He, of course, will have to examine, for the information of the division commander, records of all courts-martial held by order of the division commander and all the records ordered from brigade headquarters, which require the action of the division commander. He would also have to examine and correct charges and specifications that are preferred for trial before a court ordered by the division commander. He would also be the judge-advocate of important courts ordered by the division commander, and so it is with reference to the judge-advocate on the corps staff also.

Q. Has the experience of this war demonstrated that there was sufficient work for a judge-advocate of divisions?

A. Well, the judge-advocate of division ought to have something else to do besides that. It would not take up all his time.

Q. A division commander can use a staff officer of that kind very advantageously in other directions?

A. Yes, sir. In the war of the rebellion I did, and I was judge-advocate.

Q. Are most important general courts-martial ordered from division headquarters? A division commander has authority, as I understand it, to convene a general court-martial, has he not?

A. Yes; I should say so—sometimes serious cases of enlisted men—I should say so.

By General DODGE:

Q. Has he authority to order courts-martial on officers?

A. A division commander; yes, sir.

Q. What is the limit of the division commander's power of ordering a court-martial?

A. There is no limit. He can order a court-martial in any case.

Q. Of anybody under his command?

A. Yes, sir.

Q. There is a limit to his executing the decision of the court-martial, is there not?

A. Well, in a case of capital punishment it would have to be approved by the commanding general of the Army in the field to which the division belongs.

Q. To what extent, General, are you called upon officially to supervise the finding of courts-martial in the field?

A. Well, all the records come here to my office and I am required by law to revise them. That is the term used in the statute—"revise."

Q. Your office is the custodian of all the records of courts-martial?

A. Yes, sir. I examine them, and if I find any fatal error, I send them back. If I find any cases in which, in my opinion, the evidence does not sustain the sentence, I will report that to the Secretary of War.

Q. Is that done in every case before the sentence is carried out?

A. No, indeed; the sentences are already executed and nothing can be done.

By Governor WOODBURY:

Q. You have no power over sentences?

A. I have no power to do anything, except merely advisory.

By General BEAVER:

Q. To the Secretary of War?

A. To the Secretary of War.

Q. Have you any record, General, as to the number of cases tried by courts-martial during the late war?

A. No, sir; I have not. They are coming in now at the rate of ten a day.

Q. That will be made up later?

A. Yes, sir.

Q. Has the number been greater or less than, say, with a similar number of troops during the war of the rebellion?

A. I have no means of answering that question. I was not here at that time and I would not be able to tell by recollection.

Q. Is the number, so far as you have been able to ascertain as yet, greater or less than might have been expected?

A. That is difficult to answer. I should say neither greater nor less than about what I would have expected.

Q. Have you any suggestions to make to the commission, General, looking to the efficiency of your department in the future under such conditions as have confronted us during the war just closed?

A. I think in this way it is important to have a permanent Judge-Advocate-General's Department. When this war broke out we had a very small one, only 8 officers, including myself, in the corps, and, of course, if we had a larger number, we could place those at the more important points. That would assist a great deal. Otherwise, I hardly know of anything to suggest.

Q. Is it difficult or easy to secure, in a sudden emergency, officers in your department who are fitted for the intelligent discharge of the service?

A. In the Judge-Advocate's office?

Q. Yes, sir.

A. As now constituted, yes, sir. On account of the smallness of the department, there are quite a number of officers on the line in the Army who are very competent as judge-advocates, who have studied law and have been admitted to the bar, and who have acted as judge-advocates of the departments; bright young lawyers.

Q. Have the appointments been made from men of that character generally?

A. Into the permanent department, do you mean?

Q. No; during the late war.

A. Some of them were, but most of them were civilian appointments.

Q. The demand for trained officers when the emergency comes is from every quarter, and where it seems the most eminent, there they go, I suppose?

A. I suppose so.

Q. To what extent, General, if you know it, has the death sentence been imposed during the late war?

A. Not at all, as I know of.

Q. Do you know of any military executions during the late war?

A. No; it has been imposed, but not carried out.

Q. In how many cases has it been imposed?

A. Well, I think only one.

By General DODGE:

Q. Have you anything to suggest in relation to your department that will be of interest to the commission or of benefit to the service?

A. Well, I do not know, General. We are trying now to get an increase of the corps. As I say, that would be very valuable in case of a future experience of this kind, if there would be one.

By Colonel DENBY:

Q. If the Army is increased, you must have an increase, General?

A. Undoubtedly.

By General DODGE:

Q. There is no doubt they will give it to you?

A. None at all. I think the committee recognizes that.

By Colonel DENBY:

Q. Is your corps composed of permanent men?

A. It is as much organized, as permanent, as any other of the staff corps, except that under the present legislation the Secretary of War is authorized to detail officers of the line in case there should not be enough in the permanent Judge-Advocate's Department. We have eight geographical departments in the United States, and only had five judge-advocates available for these eight, and we had to detail three line officers. They are detailed as judge-advocates in office, and they had a tour of four years fixed.

By General DODGE:

Q. Are there referred to your department any contracts in the War Department to see whether they are legal?

A. Well, the contracts themselves we do not have, but questions arising out of these contracts are constantly referred to the office.

Q. That is, after the contracts are made?

A. Yes, sir. We do not have anything to do with the contracts themselves. They are entered into by the different departments without our having anything to do with them. I think it would be impossible to do so.

Q. Is the construction of the blanks referred to you?

A. No; they have not been.

Q. To see if they are put in proper and legal form?

A. No, sir; that has not been done.

Q. Never has?

A. No, sir.

By Governor WOODBURY:

Q. Are you the sole legal adviser of the War Department?

A. Yes, sir. Each of the heads of Departments may, if he pleases, and sometimes does, get the opinion of the Attorney-General.

By General BEAVER:

Q. It is with your department as with lawyers—they come to you after the horse is stolen?

A. Sometimes.

Q. Are the constructions of orders referred to you?

A. Sometimes. Sometimes I am required to draw up an order. I suppose fully one-half, perhaps more than that, of the work of the Judge-Advocate's Office has no relation to the administration of military justice. It relates to civil matters—contracts, claims, rights, etc. It takes up, probably, more than half of the work of my office.

Q. General, to what extent, if you have knowledge of it, was the administration of military justice cut short by the end of the war—that is, in how many cases in which charges were pending did the end of the war and the muster out of the troops stop the proceedings?

A. None at all that I know of.

Q. Has your attention been called in any case to any criminality on the part of

anybody connected with any of the departments, either directly or indirectly, in securing contracts?

A. Not at all.

By General McCook:

Q. Have you had any persons appointed in your department from civil life during this war?

A. Not in the regular departments; there has been no vacancy in that. In the corps of the judge-advocates there has been.

Q. Do you know anything in regard to their competency?

A. I knew nothing about them before they were appointed.

By General DODGE:

Q. Now?

A. Some of them have not been under my observation at all, so I would not be able to express an opinion. Those I have come into contact with, three or four, seem to me to be able and efficient men.

WASHINGTON, D. C., *December 19, 1898.*

TESTIMONY OF DR. ANITA NEWCOMBE MCGEE.

Dr. ANITA NEWCOMBE MCGEE appeared before commission, was sworn, and testified as follows:

By Dr. CONNER:

Q. Doctor, will you be kind enough to state your name, the rank you hold, the time you have held it, and the duties you have had to perform?

A. My name is Anita Newcombe McGee; rank, acting assistant surgeon, United States Army; since August 29 my duties have been in charge of matters relating to women in the Army, particularly the nurses, under the immediate direction of the Surgeon-General.

Q. Will you please tell us at what time you first brought the matter of female nurses to the attention of the Surgeon-General, and as the representative of what organization?

A. Personally or officially? Personally, I spoke to him before war was declared; officially, the 27th of April.

Q. And as the representative of what organization?

A. As chairman of a special committee of the National Society of the Daughters of the American Revolution, of which I am a vice-president.

Q. At the time of this interview with the Surgeon-General, the 27th of April, please state to the commission what representations you made to him, first, as to the necessity or advisability of having female nurses connected with the military establishment, and, second, what plans were submitted by you as the representative of the Daughters of the American Revolution for supplying such nurses.

A. We made no representations to the Surgeon-General regarding the necessity for nurses. We knew he had that already in mind, and I knew that a great many—in fact, several hundred—applications from women were already on file in the War Department, and that they were not being examined, there being no one in the office having time to give attention to it. The offer we made was to examine all applications received from women, with a view of having ready for the Surgeon-General a list of eligible nurses whenever they were needed. It was not considered in our province to dictate to the Surgeon-General in any way, or urge upon him the appointment of nurses, but simply to have ready a corps of well-certified graduate nurses.

Q. At the time of this interview was the Surgeon-General favorably inclined toward having female nurses in hospitals?

A. It was not an interview. It was a communication; and he replied that he had already authority to employ female nurses if he thought wise, and he expected to employ a certain number in certain cases and in the diet work.

Q. Was there any representations made to him, either in person or by writing, of the advisability of having a large number of female nurses appointed and stationed at the various military hospitals as they were occupied by patients?

A. No, sir; not by the Daughters of the American Revolution. We felt the need would soon develop without any urging on our part.

Q. Did it so develop?

A. It did.

Q. How early?

A. There were few nurses called for until July. The first call we supplied on May 10, being four nurses for Key West; and others were called for in June, but large numbers were not demanded until July, and especially the latter half of July.

Q. And up to the 1st or 15th, whichever date you may select, of July, are you able to tell us how many nurses have been assigned to duty in military hospitals?

A. I have not the paper with me giving the exact number, but it was under 50.

Q. To the 15th of July?

A. First of July.

Q. Was that number increased materially between the 1st and 15th of July?

A. I think it was. I should judge perhaps there were, from memory, 100 by the 15th.

Q. Not to exceed 100?

A. I think not.

Q. Were the necessities great at that time for nurses in military hospitals?

A. We had no means of knowing other than the usual means—newspapers and reports of people who had been there.

Q. At what time was it definitely decided, so far as you know, to have a large corps of female nurses assigned to duty in the various general hospitals in the various camps?

A. I don't think that that decision was reached at any one time. Whenever a surgeon felt he needed the services of trained nurses, he requested that they be assigned to him, and the Surgeon-General, so far as I know, always sent them as requested.

Q. So far as your knowledge goes, how large a list was there of nurses in your possession the 15th of July?

A. Accepted, or applications?

Q. Applications; those examined and approved by yourself.

A. Those that had been examined were between 2,000 and 3,000; those that had been accepted several hundred, say 500.

Q. Accepted by the organization and not by the Department?

A. Yes, sir.

Q. Were all the nurses approved by yourself and your associates accepted by the War Department sooner or later?

A. Yes, sir; they were.

Q. How many were assigned to duty?

A. Between 900 and 1,000 accepted by the Daughters of the American Revolution.

Q. Will you tell us, taking the semimonthly periods of the 15th of July, the 1st of August, the 15th of August, the 1st of September, and the 15th of September, how many nurses were on duty, approximately?

A. I could tell you if I had my papers. I will get them and make it part of my testimony. The 1st of September there were about 1,000. (See Appendix A.)

Q. How many of those proved to be thoroughly well-trained nurses?

A. We accepted only graduates of training schools who were indorsed by the superintendent of their schools. Therefore less than a dozen that we sent were afterwards found to be undesirable.

Q. Did they prove to be efficient in the various hospitals?

A. Very. We have received very satisfactory reports from all hospitals.

Q. Was proper provision ever made for the proper care of those nurses as respects their housing, their personal comfort, etc.?

A. The only difficult question which has arisen was regarding army rations. The nurses are entitled to army rations, and it seemed to some of the surgeons that the ration was not suitable diet for the nurses.

Q. Have they been uniformly protected in a similar manner and care afforded them, as in well-organized civil hospitals?

A. I don't quite understand the question.

Q. I want to know whether such provision was made for their comfort and privacy (the personal care of the nurses), and whether their interests were looked after as they are in ordinary civil hospitals?

A. No, sir; that was not possible or expected in camps. Everything that was possible was done for them.

Q. So far as absolutely required, were those provisions made?

A. Yes, sir; I believe they were.

Q. Have any nurses had reason to complain of disrespect, discourtesy, etc., on the part of any surgeon or medical officer in the United States Army?

A. I have had a very few letters making some small criticism, but none that were worthy of any serious attention.

Q. Were the criticisms of official action or personal conduct on the part of the medical officers?

A. Of official action only; no criticism of personal conduct has reached me.

Q. So far as you know, has the experience in this war shown that female nurses may be properly employed in military hospitals?

A. Yes, sir; decidedly so.

Q. How near to the front have female nurses been sent; in other words, how near to the moving column have there been female nurses in military hospitals?

A. Female nurses went to Santiago in the middle of July.

Q. Are the reports from them satisfactory to you and the society you represent?

A. Yes, sir; very satisfactory, although the nurses sent to Santiago were not of the same class as those sent to posts in the United States, because they were sent to nurse yellow-fever patients, and were selected by reason of having had that disease, and were, in the majority of cases, not trained nurses. The majority of them were not selected by the Daughters of the American Revolution, but by Mrs. Curtis, of Washington, who was sent to Southern States to select nurses. Many of them were colored.

Q. Many of them were familiar with nursing in civil life?

A. Yes, sir; and several had had experience in the Marine-Hospital Service.

Q. Have their services proved satisfactory?

A. Yes, sir; but not to the same degree as those of the trained nurses.

Q. Have they been reported on to such an extent as to warrant saying that they were preferable to male nurses?

A. I have been so informed by a large number of surgeons. The surgeons from Santiago whom I have seen told me their services were invaluable there, and one or two of the principal surgeons added that they would have been still more valuable had they been there sooner.

Q. As a result of the experience in the months just past, do you think it advisable that female nurses should be employed in military hospitals?

A. Yes, sir; decidedly.

Q. Has such opinion been expressed to you by the authorities in the Medical Department?

A. It has been expressed to me by a large number of surgeons who have been in Washington.

Q. The nurses, then, numbering about 1,000, their actions being satisfactory to the medical authorities of the hospital and satisfactory to the organization that selected them, is there any reason, think you, for hesitating to employ female nurses in any military hospital other than that in the immediate vicinity of the firing line, where I suppose no female nurses can go?

A. I should judge their presence was extremely desirable, as they had a better training than the vast majority of the men available for the Hospital Corps. This is the chief reason. They are employed in foreign armies, and are a permanent part of the British army, where their services have been very satisfactory.

Q. Since what date, if you remember, have they been employed in any foreign army?

A. I do not know, sir. The information from England, which has been sent for, has not been received.

Q. The English army was the first to adopt the system?

A. I understand it was the first to employ trained nurses, beginning with Florence Nightingale. The system of trained nurses is not so well developed on the Continent of Europe as in this country. You spoke in a recent question of 1,000 nurses. In giving that number I was speaking of those accepted by the Daughters of the American Revolution.

Q. What others have been employed?

A. At Montauk and Jacksonville the surgeons in charge had authority to make contracts with nurses, and they made contracts with a number of applicants whose indorsements had not been passed upon by anybody and whose services were dispensed with when the pressure of the immediate necessity was over. That was the case to a very small degree in some other points, and many of the nurses who went to Santiago were employed as already stated. Since September 7 nurses have been selected by me officially, not by the Daughters.

Q. Were those nurses that were employed by other authority than that of the Daughters of the American Revolution satisfactory, so far as the reports came to you?

A. Not as satisfactory as those whose credentials we have.

Q. To what extent have the religious orders been called upon?

A. To the full extent of their offer.

Q. Will you tell us what that extent was?

A. The Sisters of Charity furnished a few over 200 of their Sisters; the Sisters of Mercy, of Baltimore, furnished 13; the Sisters of the Holy Cross furnished 11; the Sisters of St. Joseph furnished 11; the Congregated American Sisters, which consists of Indian women from South Dakota, furnished 5; the Sisters of St. Margaret, which is a Protestant sisterhood, furnished 2; the St. Barnabas Guild, which is also an Episcopal organization, furnished quite a number. We accepted nurses regardless of their religious belief if they filed their applications in the usual way, and all those Sisters filled out the application blanks furnished by the Daughters, and certified their qualifications individually, and all were under contract and received pay exactly as the other nurses.

Q. As to those less than 300 furnished by the various orders, have the reports of them been satisfactory to you?

A. Some of the surgeons prefer them to the other nurses, and some prefer the others.

Q. But so far as you know were their duties well and efficiently performed as nurses?

A. Yes, they were; though most of the surgeons did not consider them, professionally speaking, the equivalent of trained nurses.

Q. Was their fault the want of training or some other reason?

A. Many were specially trained, but we drew so heavily upon the Sisters of Charity that some did not have training equal to those first selected. Some were superintendents of training schools, many were graduates, and all had more or less experience. Besides this, there were a few rules of the order that were considered to interfere in a minor degree with the most satisfactory army work.

Q. To what extent have female nurses been employed in diet kitchens in the various hospitals, either as superintendents or occupied in the work of the diet kitchen?

A. They have been employed in a considerable number of hospitals in charge of diet work. I have had several calls lately for women to supervise that work.

Q. Do you know how soon an effort was made to have proper diet kitchens established in the military hospitals?

A. I know the maintenance of such kitchens was the wish of the Surgeon-General in April, because he mentioned it in his letter to the "Daughters," to which I have referred. I believe Mrs. Louise E. Hogan was the first person outside the Army to urge this matter, and to personally assist in it. Several organizations, the D. A. R. among the number, established kitchens at army hospitals, but in most instances this was done by the medical officers themselves.

Q. Have the reports that you have received from the diet nurses or those occupied in the care of the diet kitchens been satisfactory to you?

A. Yes, sir.

Q. You have been officially the superintendent of all this work?

A. Yes; under the direction of the Surgeon-General, so far as it was conducted in his office.

Q. And therefore all reports would come to you?

A. Yes, sir.

Q. Both those from the nurses themselves and the officers in charge?

A. Yes, sir.

Q. And they have all been satisfactory?

A. Yes, sir. I don't mean to say that every nurse was absolutely perfect, but they were as near that as my utmost hopes could desire.

Q. Can you state to the commission why the services of female nurses were not secured prior to the 15th of July in considerable numbers?

A. Because the surgeons did not ask the Surgeon-General for them, and the Surgeon-General, believing that the surgeons in charge of the hospitals knew the situation better than he did, in most cases delayed sending nurses until these surgeons asked for them. I should explain that in this testimony I have not distinguished between my official work since August 29 and my volunteer work prior to September 7. The Daughters of the American Revolution, through what we called the "D. A. R. hospital corps," were intrusted with the selection of suitable nurses for both Army and Navy, and all applications from women, whether addressed to the President, the Secretaries of War and Navy, or the respective surgeons-general, were sent to us for examination and reply. We were, therefore, more closely associated with the Government than any other volunteer organization; but, on the other hand, the limits of our responsibility had always been sharply defined by the Surgeon General of the Army. We had no official relations or communication with the surgeons, and our official connection with a nurse ceased absolutely when she, having been accepted, signed the army contract. But when a large body of nurses had entered the service many questions arose, necessitating official action in the Surgeon-General's Office, such as the receipt of

reports from surgeons and ordering of transfers between hospitals. As I was the person having the greatest knowledge of this work, and as it was impossible for a volunteer to conduct it, the Surgeon-General appointed me an acting assistant surgeon. He then believed that the contracting with fresh nurses was about at an end, and therefore, on September 7, the Daughters of the American Revolution were relieved, with thanks, from further duty in connection with his office. Since that time I have been on duty in the War Department, my orders immediately on appointment having been to New York and Montauk.

Q. Have you in any of your special communications been informed that a delay of a week or ten days at Montauk took place in receiving female nurses who were ready to go there?

A. In the receiving of them?

Q. As we have been informed, they were ready to go at a given date we will assume the 10th, for instance); that the authorities were not ready to receive them until on the 17th day, and they went there on their own account and settled themselves down. Do you know officially in regard to this matter why they were not there earlier?

A. Yes, sir.

Q. Please state.

A. I asked the Surgeon-General, before the troops arrived at Montauk, if he would not permit us to designate a certain number and have them all ready to go there at once before the troops should arrive, knowing their services would be needed, but, as I said before, he considered it wiser to leave that matter to the surgeon in charge, and waited until he asked for the nurses. That occasioned a great deal of delay, as did the fact that conflicting orders came.

Q. Orders from whom and about what?

A. About nurses.

Q. From whom?

A. Several people at Montauk Point.

Q. Who, please?

A. The surgeon in charge sent requests for nurses; the nurse in charge, by his authority, sent requests for nurses.

Q. She was there prior to the time of the coming of the nurses?

A. We sent her there with the first small party. I understood from General Wheeler that he had also ordered nurses. I don't know the names of others who did so, but I know the governor of Michigan sent a party of nurses, and some went from Boston.

Q. Was not the Surgeon-General sending nurses there at the same time?

A. He gave me an order immediately whenever he received a request.

Q. In each case female nurses were furnished only upon application from the surgeon in charge of the hospital?

A. That was the rule.

Q. Was the rule followed in all cases, or were there exceptions to it?

A. There were many exceptions to it at Montauk.

Q. Early or late?

A. All the time, I suppose. No contracts were made at Montauk until after I visited there the 1st of September, and then contracts were made with all nurses serving there.

Q. Prior to that they had been there on sufferance?

A. They were there under orders, those who went officially having expected that contracts would be made by the authorities when they arrived. The original procedure was, when the Surgeon-General received requests from surgeons for nurses, he sent over to me, representing the Daughters of the American Revolution, with my associates, for a certain number of nurses to go to a certain place. I and my associates selected the number and sent the names and addresses to him

His clerks then made out the contracts and mailed them to each nurse with a transportation order. She then went to the hospital to which she was ordered. This procedure occasioned some delay, and in order to avoid this a society in New York, called the "Red Cross Society for the Maintenance of Trained Nurses, Auxiliary No. 3 to the American National Red Cross Relief Committee," offered to pay the traveling expenses of the nurses in order that they might respond to a telegraphic order from the D. A. R. without waiting for the contract to be prepared and mailed with the transportation order, this delay in some cases being a week to ten days. That offer having being accepted by us and the arrangement sanctioned, nurses were ordered during August by a telegram signed by me. When nurses went to Montauk, it was supposed that contracts were then made immediately, but, as I said, the officers were too much occupied to do this at once, and they had not time to do it until after my visit, the 1st of September.

Q. Were the nurses doing their duty before the contract was signed just the same as after they were made?

A. Yes, sir.

Q. Was any report made to you that the nurses were being overworked?

A. Yes, sir; I heard that such was the case for a time at several hospitals.

Q. Have you had a large list from which to select? Was the overworking of the nurses due to the fact that the requests had not been made for them or that you had not been able to send them?

A. Due to the fact that requests had not been made in time. In a few instances only a shortage of suitable applicants caused slight delay in completing very large orders.

Q. Do you know how large a number of nurses, what proportion of them, got sick, and what proportion died?

A. I am now obtaining information of the number that fell sick. At certain of the hospitals, notably at Chickamunga and Montauk, there were a number of typhoid cases, although the proportion of sickness was not as large as among the Hospital Corps men. The number of deaths has been 12.

Q. All at one hospital?

A. At various hospitals throughout the country, including Santiago and Porto Rico.

By Colonel DENBY:

Q. Doctor, how many members are in your association?

A. The Daughters of the American Revolution?

Q. Yes.

A. About 25,000.

Q. Where do they generally live?

A. In every State and Territory in the Union. We had committees of Daughters in all the large cities for this work.

Q. What is the difference between the Daughters of the American Revolution and the Daughters of the Revolution?

A. The Daughters of the Revolution is an organization of between two and three thousand members only, with headquarters in New York. It is not a national society in the sense that ours is, and ours is the only woman's organization which has a charter from the Congress of the United States. We report to Congress annually through the Smithsonian Institution.

Q. What are the purposes of this organization?

A. Patriotic and educational. The work of the Daughters has been in the advancement of patriotism and has been largely in the schools.

Q. Where do you get funds?

A. From our annual dues.

Q. Do you take up subscriptions from the public?

A. Not at all; only from our members.

Q. Do you hold meetings?

A. Yes, sir. The national society holds a continental congress annually in February in Washington City and the national board of management meets monthly here; the local chapters throughout the country meet at their own convenience, generally monthly.

Q. Meet in the capitals of the States?

A. No, we have no State organizations; but in towns and cities.

Q. Do they engage in charity in their locality?

A. Not as a rule; but in the war they have taken great interest in the families of soldiers and have contributed very largely to that and the sending of supplies to the hospitals.

Q. Can you tell us about how much money you spent in that way?

A. The "D. A. R. hospital corps," the body of which I was director, controlled in money and supplies nearly \$60,000; but that is a very small fraction of what the entire national society contributed. The total sum is several hundred thousand dollars.

Q. How did the services of this organization compare with those of the Red Cross in general?

A. Which Red Cross do you mean; there were so many?

Q. I did not know that there was any except the National Red Cross.

A. There is an "American National Red Cross Society," which is apparently a small organization, having no published membership, and known to the public only through the personal work of Miss Clara Barton. There are many other Red Cross societies in this country.

Q. There is also a White Cross now?

A. So I believe, but the various Red Cross societies are constantly confused by the public. The Relief Committee in New York City is the organization which formed the "auxiliaries." The Philadelphia Red Cross acts independently. The numerous Western Red Cross societies have nothing to do with the "national" society.

Q. Does your organization engage in charity other than military charity?

A. It is not a charitable organization, although any chapter may take up work it considers desirable, such as caring for the daughters of Revolutionary soldiers, a few of whom are still living.

Q. If there was no war, what would you do?

A. We are now preparing a history of the organization to send to Congress. The work of the society includes the preservation of historic relics, graves, sites and buildings, such as the Block House in Pittsburg, and their marking by monuments. A portion of Independence Hall has been restored and is kept in order by the Daughters. It includes also the preparation of historical papers and the publication of these and of old documents; the holding of meetings to commemorate historical events and to keep the members in touch with the principles and facts of the Revolution and American history generally; the instruction of children in these matters; the offering of prizes in public schools and also to college students for essays on historical subjects; the training of foreign children and their parents in American institutions; the publication of a series of lineage books, giving the biographies of Revolutionary heroes and descent of members from them; the preparation and preservation of lists of prisoners on the ship *Jersey* and other ships during the Revolution, with perhaps also the erection of a large continental memorial hall in Washington to contain monuments and historical records. We publish the American Monthly Magazine, containing historical articles and our own proceedings.

Q. Has your organization taken any stand with regard to the Washington Memorial Association?

A. This society has had from its organization a committee on the National University, but it has no connection with the George Washington Memorial Association.

Q. Do the members belong interchangeably?

A. No, sir; there is no official connection between them.

By General McCook:

Q. Do you furnish flags to schoolhouses?

A. Yes, sir; and portraits of George Washington and copies of the Declaration of Independence are also presented to schoolhouses. I should like to add that the National Society of the Daughters was the only organization that ever proposed to act as an examining board for Government nurses. A great many others, from March to September, offered to furnish nurses, trained and untrained, old and young, but ours was the only one that ever thought of testing every applicant who might wish to serve, and ours was, therefore, the only one that proposed to establish a uniform standard for army nurses. When I suggested to the Daughters that this work should be taken up and this offer made, I had in mind the urgent necessity for such a standard, and therefore utilized my professional knowledge of hospitals in the framing of requirements, after a consultation with the Surgeon-General. Experience showed that, with the exception of the organizations of trained nurses themselves, not a single society that offered nurses appreciated this necessity until after we had required compliance. It is to our high standards more than to any other one thing that I attribute the success of the army nurse. We found the utmost assistance in our work was given by the committees of Daughters throughout the country, for their personal investigation of the character and standing of the nurses was invaluable. The applicants were tested on three points: First, was their professional ability, for which we required graduation from a training school and also the indorsement of the superintendent of the school; and secondly, their personal reputation, for which we depended on the indorsement of a lady of known standing, in which respect the Daughters were extremely useful; and thirdly, the health and strength of the applicant, in which the Daughters also took interest, and we required a physician's certificate whenever there was any doubt about it. Besides these considerations, one of the strong points of our work was that we never antagonized the Government, never strove to influence official action, and had no newspaper friends to proclaim our doings to the public, but attended to the duty given us and obeyed orders as if we had been under military discipline. Even the distribution of supplies through the D. A. R. hospital corps (which was principally attended to by our treasurer, Mrs. Amos G. Draper) was done under instructions from the Surgeon-General's Office, indicating where they would be most acceptable.

By Colonel DENBY:

Q. Did any Daughters themselves go as nurses?

A. Very few Daughters were trained nurses, but I should say, perhaps, as many as five did go as nurses.

Q. Were they trained nurses?

A. Oh, yes; Daughters who applied but did not come up to the standard were refused just as others were.

By General McCook:

Q. You sent out circulars, of course, to secure the services of trained nurses?

A. Yes, sir.

Q. In selecting these nurses were any of them notified that their services would be accepted that were afterwards not accepted at all on account of some orders? Were some accepted for tropical climates and some for other climates; and of those selected for tropical climates, were they called on or not?

A. At one time we asked applicants if they would go outside the United States, but as almost all said yes, there was no need for a separate list. I remember one immune who was assigned to duty in Cuba, and she responded she would not go outside of the United States. We did not notify nurses as a rule that they were accepted except in response to inquiry, because it might create an impression in their minds that we were certainly going to send for them, and we could not say that in advance without knowing how many would be demanded.

Q. Then there were no obligations or pledges made?

A. None whatever.

Q. I have received communications from anonymous writers on that subject.

A. The circulars of acceptance which have been sent out by the Daughters and which are sent out by me now are always worded to this effect: "Your name is placed on the eligible list, but whether or not you will be appointed will depend on the number of nurses required."

By Governor WOODBURY:

Q. What has been the number of sick and deaths?

A. About 1,500 women have been enrolled altogether, and twelve died. Reports of sickness have not been complete enough for me to answer about that.

By Dr. CONNER:

Q. Doctor, please tell us whether or not there was demanded of any nurse directed by you to report for duty a pledge that nothing would be said as to what was observed in the hospital?

A. No, sir; that never occurred to any of us. It was never done or thought of, and would have been impossible, as we had no control of any kind over the nurses after appointment.

Q. I ask the question because a report was made to us that a certain person was called upon to take an oath or obligation of some sort or other that everything would be secret. We ascertained that that was with reference to the Red Cross work and no officer in the Army had anything to do with it. I therefore asked whether any obligation was required from any individual employed by you.

A. I would like to explain that the Daughters of the Revolution were assisted by a number of these Red Cross societies and other societies. The assistance of all organizations was welcomed, and when their applicants conformed to our standards they were accepted without regard to whether or not they applied through any other organization. The prejudice was rather in their favor than against them, and it is possible that one of these various Red Cross societies may have said something of that kind without our knowledge, although I do not believe it. It would have been of no force, however, as these societies were equally with ours debarred from control over the nurses.

Q. Nothing came to your official notice?

A. No, sir.

Q. What one of the Red Cross societies in the United States is officially connected with the International Red Cross?

A. The American National Red Cross Society is the one which is connected with the International Society, but never at any time offered any nurses to the Surgeon-General, or supplied any contract nurses. It is not one of the Red Cross societies above referred to.

Q. Did it do any nursing work during this war?

A. I understand that Miss Barton had with her in Cuba three or four women who did work as nurses, but, as far as I know, they were not trained nurses.

Q. Was a Miss Jennings employed under authority from you as nurse or was she a nurse?

A. No; she was one of those I spoke of as in Cuba with Miss Barton. She was not a trained nurse, and of course not a contract nurse.

Q. She was under the Red Cross?

A. Yes, sir.

Q. And reported to whom?

A. Miss Barton, I presume. She was not a professional nurse.

Q. And therefore could not be employed by you?

A. No, sir. I should like to speak of the great assistance rendered to the nurses by the auxiliary in New York, which is an auxiliary to the relief committee and which spent a considerable sum of money in providing for the maintenance of nurses, especially in supplying them with luxuries that the Government could not furnish.

Q. That was a Red Cross association in name? It had to deal with the sick and wounded in war, but was not a Red Cross association under official sanction?

A. That was a temporary organization which they tell me is now closing up its affairs.

Q. It might just as well have been called by any other name than the Red Cross?

A. Yes, sir. They certified nurses to the Daughters of the American Revolution, who were accepted by us and appointed. The Red Cross of Minnesota and the Red Cross of St. Paul have also supplied nurses in the same way.

Q. Would there, think you, from what you have learned, have been any difficulty in obtaining 5,000 trained female nurses by the 15th day of May?

A. I think 5,000 is too large a number.

Q. You could not secure them? Could 2,500 have been secured?

A. I think that number might have been, but it is the extreme number. I have examined now nearly 6,000 applications, most of whom were untrained, but if the nurses feel there is a need for their services they are very willing to volunteer. One reason why applicants were not as numerous as they might have been is that they were not accepted promptly, and the great demand came so late in the season that they thought it useless to apply.

Q. Is the pay provided for these nurses, in your judgment, sufficient?

A. I don't think it is, and that opinion is shared by a very large number of the surgeons; almost all with whom I have spoken.

Q. Was there, through you or otherwise, any application to increase that pay indirectly by allowing the nurses to have their necessary personal expenses paid in addition to the pay proper; that is, for washing and things of that sort?

A. Recently—that is, since my official appointment—the Surgeon-General had wished to have that done, but he found later that the accounts would not be paid by the Treasury, so he was unable to do it.

Q. Do you think it is right that a nurse who is able to get \$15 to \$20 a week for her services should be employed by the Government at the rate of \$30 a month and have to pay \$4 a month out of that for her washing?

A. I have been extremely anxious to have the washing paid for, and so has the Surgeon-General also.

Q. The fault lies with the law establishing nurses principally, and not with any individual?

A. Not with the law establishing nurses, but with some general law. I don't remember the details. It has been recently looked into by the Surgeon-General.

By General McCook:

Q. Was there an increase of \$1 a month given these nurses for the laundry of their clothes, other than pertaining to their profession. I have had complaints that they have had to pay for their laundry—that they got their rate of pay per month, and they washed simply their clothes at the public laundry free, and they had to pay out of their wages for their other clothing. Was there any additional pay given these nurses?

A. No, sir. This Red Cross auxiliary in New York paid for the laundry of the

nurses at several hospitals, but the Government never did so, though lately the Surgeon-General tried to do it without success.

Q. Do you know why he failed?

A. They found that the Treasury would not pay the account—the Comptroller would not allow them—so he was obliged to send out a notice a week or two ago stating that that could not be done in any case.

By General WILSON:

Q. Does the law specify what the salaries shall be?

A. The law passed last April specified the employment of 300 nurses at \$30 a month, and the additional nurses over 300 were included in some general clause. Then the present appropriation covered up to December 31 of this year. The bill now before Congress contains a clause providing for the pay of nurses at the salary of \$30 a month. In the House that was amended so as not to exceed 300 nurses at \$30 a month. The Surgeon-General objected to that, and on motion of Senator Hale these restrictions were cut out in the Senate and the matter is now in conference. The chief nurses are paid, as a rule, \$60 a month.

Q. In what way are they permitted to be paid twice the amount of an ordinary nurse?

A. The Surgeon-General makes a contract with them at that rate.

Q. Can he do that with any nurse or only head nurses; has he been restricted to making that \$30?

A. He has been restricted, under the law I spoke of, to \$30 a month.

Q. Are contracts made with men as contract nurses?

A. Yes, sir; just the same as with women; but I have had nothing to do with them; I believe there have been only about 400 all told.

By General McCook:

Q. Have you any suggestions to make to this commission which would add to the benefit of the Army and nursing in the future?

A. I am very anxious to have the nursing in the Army established on a basis similar to that in the English army, so that nurses would pass through a probationary course in connection with one of the army hospitals, at the end of which time, if accepted by the nurse in charge, she should enlist for a term of years. That probationary period would avoid the possibility of objectionable persons being admitted in the Army service; of course only graduate nurses being accepted as probationers. I hope that plan will be adopted, and the minimum number of nurses be regularly enrolled in that way. Additional numbers can be procured according to the present contract method, being taken from a reserve corps.

By General DODGE:

Q. Is that provision in the bill before Congress?

A. No, sir; it is not.

Q. Has it been recommended?

A. The Surgeon-General has it now under consideration, and I don't know what will be done with it. It is the opinion of very many surgeons that that is the desirable thing to do.

Q. Have you any other suggestion or information to give us on any subject upon which we have not questioned you?

A. I should like to add that these appointments have not been political appointments at all. The Surgeon-General has always instructed me that the best women should be secured without regard to influence of any kind, and I have been very careful in that respect. Sometimes women who are not acceptable have tried to bring influence to bear. Of course, if political indorsements were sent by a nurse who was otherwise entirely eligible, she would be appointed.

By Colonel DENBY:

Q. Were there many Southern women?

A. Yes, sir; they were taken from all parts of the country, excepting from the far West. This exception was made on account of the expense of transportation. The Quartermaster's Department provides the transportation, and the Surgeon-General wished not to put too heavy a burden upon it. The proportion of Southern women was much less than that from the North, because there are very few trained nurses in the South. New York is the great center for trained nurses, and more were taken from there than from any other city. The Daughters of the American Revolution prepared a map showing the points from which they were taken.

Q. Was there any difficulty because of the nurses belonging to any religious class, any insubordination, any objection to doing what was directed to be done?

A. The nurses of the various organizations have rules of their own, which they must obey.

Q. Did these rules seriously interfere with the nursing of the sick?

A. Not when they had Hospital Corps men to do what they were not allowed to do.

Q. Then their orders were not such as to materially influence the action of the nurses, or to interfere with their usefulness?

A. The surgeons differ on that point. A few thought this a strong objection to them, while others thought differently and much preferred to have the religious orders.

By General DODGE:

Q. Have you any other suggestion or statement to make?

A. Not that I think of at the moment.

APPENDIX A.

Contract nurses, United States Army, 1898.

Hospitals.	May—		June—		July—		August—		September—		October—		November—		December—	
	15.	31.	15.	30.	15.	31.	15.	31.	15.	30.	15.	31.	15.	30.	15.	31.
<i>Key West, Fla.</i> (general hospital)	4	4	4	4	9	9	9	6	0	—	—	—	—	—	—	—
<i>Hospital ship Relief</i>	—	2	8	8	6	6	8	8	8	9	8	8	8	8	8	9
<i>Chickamauga, Ga.</i> (Leiter general hospital)	—	—	0	6	21	31	40	40	33	30	0	—	—	—	—	—
<i>Atlanta, Ga.</i> (Fort McPherson general hospital)	—	—	—	—	5	11	15	40	81	58	58	62	59	57	54	44
<i>Fort Meyer, Va.</i> (general hospital)	—	—	—	—	—	—	16	51	52	50	42	45	58	62	54	55
<i>Santiago de Cuba</i> (various hospitals Fifth Corps)	—	—	—	—	—	—	76	88	76	50	43	39	47	35	33	32
<i>Fort Monroe, Va.</i> (general hospital)	—	—	—	—	—	—	8	23	30	48	40	30	18	15	7	9
<i>Tampa, Fla.</i> (hospitals Fourth Corps)	—	—	—	—	—	—	1	12	3	3	3	0	—	—	—	—
<i>Chickamauga, Ga.</i> (Sternberg general hospital)	—	—	—	—	—	—	—	23	166	166	117	109	70	12	0	—
<i>Sheridans Point, Va.</i>	—	—	—	—	—	—	—	2	2	2	2	0	—	—	—	—
<i>Fort Thomas, Ky.</i> (general hospital)	—	—	—	—	—	—	—	30	35	42	32	32	37	30	30	22
<i>Montauk Point, N. Y.</i> (Camp Wikoff hospitals, Fifth Corps)	—	—	—	—	—	—	—	—	190	281	169	70	20	0	—	—
<i>San Francisco, Cal.</i> (division hospital, Presidio)	—	—	—	—	—	—	—	—	19	38	36	35	34	39	23	20
<i>Huntsville, Ala.</i> (various hospitals Fourth Corps)	—	—	—	—	—	—	—	—	2	15	74	74	59	62	85	80
<i>Chickamauga, Ga.</i> (Sanger-Hoff general hospitals)	—	—	—	—	—	—	—	—	77	77	0	—	—	—	—	—

Contract nurses, United States Army, 1898—Continued.

Hospitals.	May—		June—		July—		August—		September—		October—		November—		December—	
	15.	31.	15.	30.	15.	31.	15.	31.	15.	30.	15.	31.	15.	30.	15.	31.
Fernandina, Fla. (various hospitals Fourth Corps)								27	28	2	0					
Jacksonville, Fla. (various hospitals Fourth Corps)								100	167	200	300	50	23	23	0	
Camp Alger, Falls Church, Va. (Second Corps)								10	10	0						
Olivet (transport)								1	0							
Porto Rico (various hospitals)								33	79	102	102	90	95	80	70	
Shinnecock (transport)									6	0						
Fort Monroe, Va. (Josiah Simpson general hospital)									2	25	45	45	45	45	45	45
Lexington, Ky. (First Corps)									31	48	90	90	34	0		
Camp Black, Hemstead, N. Y.									7	7	0					
Anniston, Ala. (Second Division, Fourth Corps)									3	6	15	20	27	22	14	13
Knoxville, Tenn. (division, First Corps)										40	39	30	24	14	4	0
Bedloes Island, N. Y. (post hospital)										3	3	3	3	3	4	4
Plattsburg Barracks, N. Y. (post hospital)										1	2	1	0			
Fort Washington, Md. (post hospital)											3	3	3	3	0	
San Antonio, Tex. (Fort Sam Houston)												1	1	4	4	4
Savannah, Ga. (First and Second Divisions, Seventh Corps)											125	125	130	130	25	
Honolulu													19	19	19	
Manila (Eighth Corps)													(a)	(a)	17	
Americus, Ga. (Second Division, First Corps)														25	25	0
Governors Island, N. Y.														1	1	1
Columbus, Ga. (Second Division, First Corps)														28	30	14
Augusta, Ga. (division, Second Corps)														7	8	8
Fort Hamilton, N. Y.														5	5	5
Greenville, S. C. (Second Division, Second Corps)														11	11	12
Albany, Ga. (Second Division, First Corps)														14	14	14
Macon, Ga. (First Division, First Corps)														7	15	15
Fort Snelling, Minn. (post hospital)															3	3
Havana, Cuba (Camp Columbia, Seventh Corps)																100
Matanzas Province, Cuba (First Corps)																73
Puerto Principe, Cuba																6
Total	4	6	18	23	47	162	326	924	1158	1065	1104	880	695	750	672	686

*a En route.*WASHINGTON, D. C., *December 20, 1898.***TESTIMONY OF CAPT. A. E. HARDY.**

Capt. A. E. HARDY appeared before the commission, was sworn by General Wilson, and testified as follows:

By General BEAVER:

Q. Will you please give us your name and residence?

A. A. E. Hardy, Quincy, Ill.

Q. Have you served in the Army of the United States in the late war with Spain; and if so, in what capacity?

A. Captain, Fifth Illinois Infantry.

Q. When did you enter the service, and how long did you serve?

A. Entered it April 25, and served until October 14.

Q. You were discharged with your regiment, or mustered out?

A. Mustered out with the regiment.

Q. Where did you serve during your whole service; give us, please, the different camps in which you served and the dates as near as possible?

A. From April 25 until about May 10, our State camp in Illinois—Camp Lincoln, Springfield, Ill.; about the 12th or 13th of May until the 3d of August, Chickamauga Park; from the 3d of August until about the 21st or 22d, at Newport News, and from the 25th of August until about the second week in September, at Lexington, Ky.; from there we were sent home.

Q. Had you any previous experience in the military service in the National Guard of Illinois?

A. I have been in the National Guard twelve years.

Q. With the regiment with which you served during the war?

A. The same regiment.

Q. What position did you occupy in your National Guard regiment?

A. I was a commissioned officer for seven years; a captain for five years of the seven.

Q. What was your experience in these several camps in connection with the Subsistence Department and the manner in which your men were fed?

A. The Commissary Department was as much and even more than we had expected, nearly at all times, except at the first rush. We were the first regiments that arrived in the park, and the regiments arrived very rapidly there, and the road between Chattanooga and the park was congested a few days, and our supplies were slow in getting there at first; but when they once arrived, we had no difficulty. We were issued full rations at all times.

Q. Did you take any supplies with you from your home camp to Chickamauga?

A. Yes, sir.

Q. How many days?

A. We had ten days' travel rations.

Q. What was the quality of the rations issued in general; good or otherwise?

A. The last half of our experience it was very good indeed. Our train rations were not good. The men did not seem to be able to eat the train rations after the first two or three times issued.

Q. After carrying them in their haversacks, you mean they got unpalatable, or was the ration itself unpalatable?

A. The corned beef you could not make the men eat. There was no way you could fix it to make it palatable, but the field rations were all that could be desired.

Q. Was this corned beef issued in cans?

A. Yes, sir.

By Colonel DENBY:

Q. Small cans, one can to each man, or how?

A. No; one can for about four men, I should judge. I do not know exactly the proportion.

By General BEAVER:

Q. Did you have any sick men when you left your home camp and went to Chickamauga?

A. No; we had one man taken sick on the train, whom we left at St. Louis, and he joined the regiment about two weeks afterwards.

Q. Did you have any sick when you arrived there?

A. No.

Q. When did you have your first cases of sickness after arriving at the camp?

A. A great many of them commenced to get sick from ten days to two weeks after we got there.

Q. What was the character of their sickness?

A. Typhoid fever principally.

Q. Can you recall the date of the development of the first case of typhoid?

A. No; I can not.

Q. As nearly as you can, within ten days or two weeks?

A. No; I can not, but I can recall the date when we had the most sickness, and that was the middle of June, from June 15 to 18. At that time 15 per cent of our officers were sick with typhoid fever.

Q. And what proportion of your men?

A. I don't think quite as much. I think about from 10 to 12 per cent.

Q. Did the disease develop so as to justify the supposition that the germs had been received at your home camp or that the disease developed entirely after you reached the camp, and originated there?

A. It was the impression of every one I talked with—the city physicians there at Chattanooga, several of whom I got acquainted with—that the disease was there at the camp.

Q. And that you had brought none with you?

A. That we had brought none with us.

Q. What was your brigade and division?

A. First Division, First Brigade, First Army Corps.

Q. What was your regiment, Third or Fifth?

A. Fifth. Right over there [pointing to chart in room], near the colored field.

Q. I see you were encamped in the woods [examining chart]?

A. Yes, sir.

Q. By whose direction was that?

A. I do not know.

Q. Do you know who fixed the limits of your camp?

A. Our colonel.

Q. What steps were taken looking toward the camp sanitation; how soon were your sinks dug?

A. The very night that we got there.

Q. What was the character of them; were they deep?

A. As deep as we could get them in the ground. Some places we could get them 5 feet and other places 7 or 8 feet. There were a great many rocks there.

Q. How far were they from the line of your company tents or company kitchens?

A. They were 500 feet away from our kitchens.

Q. And your kitchens were immediately below your company quarters, I suppose?

A. Yes, sir.

Q. When did you send your first men to the division hospital?

A. I can not give the exact date.

Q. Can you approximate it—the middle of June, or before?

A. About the 1st of June.

Q. Do you know how many men you had from your company at any one time in the division hospital?

A. I had five at one time.

Q. Did you make any personal visits to them at the hospital?

A. Yes, sir.

Q. How were they cared for?

A. It seemed to me that they were not cared for very well.

Q. In what respect—as to the medical attendance, as to the nursing, as to their food, as to their beds, or in what respect do you think the care was deficient?

A. The beds seemed to be very uncleanly. I was there several times, but I was

refused admission on various accounts. The beds seemed to be uncleanly and the nurses seemed to know very little about their duties.

Q. What nurses did you find there; simply the male nurses?

A. Yes, sir.

Q. Detailed from your own regiment or from other regiments, or had they been enlisted in the Hospital Corps?

A. They were at first detailed from the regiments, and afterwards, I think, they were mustered into a separate hospital corps.

Q. Were the beds provided with sheets, pillows, and pillowcases?

A. Yes, sir.

Q. Had each man a cot and a mattress?

A. Yes, sir.

Q. Did you pay particular attention as to whether or not there were hospital conveniences there?

A. Well, I noticed very few appearances of any of the hospital conveniences.

Q. Did your men complain of their treatment to you?

A. Very much indeed.

Q. In what respect?

A. Lack of proper food. No milk, for instance, at first, except these milk tablets dissolved, and lack of attention.

Q. Do you know how long that lack of milk continued?

A. I was not at the division hospital. At their regimental hospital I know that up to the middle of June we had not any facilities for getting milk.

Q. Did you maintain your regimental hospital at the same time the division hospital was in operation?

A. Yes, sir.

Q. At the time you had five patients in your division hospital how many had you in your regimental hospital?

A. Two; my first lieutenant and one of the men were there. They kept them there two days before they sent them to the division hospital.

Q. At the time that you say you had no facilities for getting milk at your regimental hospital were they supplying milk at the division hospital, do you know?

A. I do not know about that.

Q. Who was in charge of your regimental hospital?

A. Major Keeley.

Q. The surgeon of your regiment?

A. Yes, sir.

Q. Did he have any assistants?

A. He had two assistants.

Q. Were they with him at the time your regimental hospital was in operation or had they been detailed in the division hospital for other duties?

A. There was at no time, I think, more than one surgeon in our regimental hospital. One was detailed on the brigade staff and another one was sent away somewhere—I think to Huntsville.

Q. How many men did you lose in your company, Captain?

A. But one.

Q. Of what disease did he die?

A. Typhoid pneumonia.

Q. Was he a typhoid-fever patient?

A. Yes, sir.

Q. Was he recovering from typhoid when he took pneumonia, or was pneumonia the first disease?

A. Typhoid was the first disease. He went to the division hospital, and escaped one night while delirious. He escaped the nurse. He was two hours out in the wet grass, and he was taken with pneumonia, and his father came down from

Illinois to see him. He saw that he was dying, and got permission to take him to a Catholic hospital at Chattanooga. He took him down there, and the doctors there claimed he died of lack of attention.

Q. Did they specify, do you know, in what respect the attention was wanting?

A. They said he had not been treated for pneumonia, and while he had the typhoid he had not had his proper baths—I don't know much about typhoid—and he had not been treated for pneumonia.

Q. The pneumonia was claimed to be the immediate cause of his death?

A. Yes; he choked to death, I think.

Q. How long after he reached the hospital in Chattanooga did his death occur?

A. Three or four days—it was within a week.

Q. While in the hospital at Chattanooga was he attended by any of the army surgeons, or exclusively by the surgeons of the hospital or physicians of the hospital?

A. I think there was one army physician that used to call on him. I don't know his name. There was one young German that everybody seemed to like around the hospital, and he called on him, and we had also one of the resident physicians.

Q. Was that the only man you lost during your term of service?

A. Yes, sir.

Q. What was the name of this man?

A. William S. Campbell.

Q. Do you know what the loss from disease in your entire regiment was?

A. I think it was seventeen.

Q. So that your company was a little better than the average?

A. Yes; I was the only one that lost but one man.

Q. Did you visit this man at the hospital at Chattanooga?

A. Yes; but I was not able to see him; he was too ill.

Q. How long before his removal from the division hospital to the hospital in Chattanooga was it that he escaped during the night—or was it during the night?

A. Yes, it was during the night; and I believe it was some two weeks before we took him down to the hospital.

Q. So that he lived some three weeks after his escape from the hospital?

A. Yes, sir.

Q. About two weeks in the division hospital and a week in the Chattanooga hospital?

A. Nearly a week in the Chattanooga hospital.

Q. Was he suffering from pneumonia during all this time—the pneumonia immediately supervened after his escape?

A. I do not know exactly about that. I went over to see him several times, and was assured that there was not much the matter with him; that he simply had typhoid. It was after his father went down there that we found out from the nurse he had escaped.

Q. Do you know any of the circumstances attending his escape; were they investigated in any way?

A. No; I believe not.

Q. Who was the surgeon in charge of the hospital at that time?

A. Dr. Huidekoper.

Q. No; he was the corps surgeon.

A. Yes. Well, I don't know who was in charge of the division hospital.

Q. Can you fix the date? We can probably get that in another way if you can give us the date.

A. The date of this man's death?

Q. The date of his escape.

A. I can not do that without looking up my company records.

Q. What was the date of his death?

A. That I can not tell exactly; somewhere toward the latter part of June.

Q. Then it was probably about the 1st of June that he escaped, along between the 1st and 10th somewhere?

A. I should say nearer the 10th of June. I should think that would be about it; I do not know.

Q. The fact of his escape was not known to you until after his father came, which was about a week before his death?

A. Yes, sir.

Q. Do you know whether it was known at the hospital at the time it occurred?

A. I do not know about that.

Q. Do you know how his absence was discovered?

A. No.

Q. Did he return voluntarily or was he found?

A. He was found and brought back.

Q. Have you lost any men since your discharge from the service?

A. No. I have one man, though, who will probably not live a great while. Just before I came East I saw his father taking him to Arizona for his health.

Q. Lungs affected?

A. Lungs affected.

Q. Had he had typhoid?

A. No.

Q. Had he measles?

A. No. This man, whose name was Kane, seemed to be ailing for several weeks—probably two weeks and a half. It was reported at the regimental hospital nearly every morning by one of the surgeons and was reported back for duty. One evening at parade he collapsed and was carried to his tent and sent over to the division hospital very sick. From there they immediately removed him to Fort Thomas, Ky., and about two weeks after I got a letter from the surgeon in charge saying he had discharged this man on account of physical disability. He was suffering from phthisical pulmonaris, and inquiry made afterwards of reputable physicians showed there was no need of that man drilling that long.

Q. How did he pass the examining surgeon when he went into the service? Were your men examined?

A. Yes; and very thoroughly. He was apparently a very strong and healthy man.

Q. Did this phthisis develop during his service?

A. Yes, sir.

(Here Dr. Conner asked in regard to some questions he did not catch and requested same not to be reported, as being merely repetition.)

By Governor WOODBURY:

Q. Are you sure that this is not the 1st of July instead of the 1st of June that you are talking about in regard to typhoid fever?

A. No. When we had so many sick officers in the hospital, it was the 18th of June. That I know, because we received our recruits from the North on that day and my lieutenant was taken down to the hospital that day, and I remember it well.

Q. How do you account for so much typhoid fever the 1st of June when you had no illness when you left home?

A. I did not mean we had on the 1st of June. It was the 18th when I had the most sickness.

Q. You say the first case was recognized—

A. I should judge about the 1st of June.

Q. How do you know that was typhoid fever; what means of knowledge had you that the disease with which they were afflicted was typhoid fever?

A. The hospital surgeon pronounced it typhoid fever. They took the treatment for typhoid. Several of them were there several months afterwards, but they all got well.

Q. Did the surgeon at the hospital tell you it was typhoid fever?

A. Yes, sir; he told me in the case of my lieutenant, who was down there.

By General BEAVER:

Q. Captain, to what extent was your company uniformed and clothed in every way when you reached Chickamauga Park?

A. Completely.

Q. You had received that at home?

A. Yes, sir.

Q. From the State or United States Government?

A. From the State.

Q. So that you entered the service armed and equipped?

A. Yes, sir; in every way.

Q. Had you a complete equipment—arms?

A. Yes, sir.

Q. And accouterments?

A. Yes, sir; except we were short of canteens.

Q. Did you draw anything except canteens from the United States Government when you reached Chickamauga?

A. For recruits we did.

Q. What was the strength of your command in the National Guard service?

A. Eighty-one.

Q. And were recruited to 106?

A. Yes, sir.

Q. So that the new men that came to you after you got into the camp were clothed and armed and equipped by the United States Government from the depot at Chickamauga, were they?

A. Yes, sir.

Q. How soon was that equipment completed.

A. Well, the principal—there was very little delay in that, nothing to speak of. We have not complained at all in regard to that.

Q. Were your tents brought with you from home?

A. Yes, sir. They were afterwards replaced by tents issued by the Government.

Q. New canvas?

A. Yes, sir.

Q. What you brought had been in service.

A. Yes, sir; some five or six years, and were too large. They were 9 by 9 tents, and the Government issued 7 by 7.

Q. Was the tentage sufficient for your own men?

A. We had plenty of tentage.

Q. Are the conditions which prevailed in your company those which prevailed throughout your regiment, so far as you know?

A. Yes, sir; except I had less sick than any other company in the regiment.

Q. Did you regard your camp policed—as carefully attended to?

A. I think it could not have been improved on. Everything was kept as clean as the broom could make it, and I got acquainted with several Regular Army officers down there—one I remember, Lieutenant Wright, in charge of depot quartermaster supplies, and he came and remarked how clean everything was.

Q. Were your sinks disinfected?

A. Yes, sir; we even bought lime out of the regimental fund.

Q. And the dry earth used freely in covering the excreta?

A. Yes, sir.

Q. Did your men use the sinks generally?

A. Yes, sir; we had no trouble about their wandering around. There was none of that in our regiment or in our brigade there.

Q. Have you anything else, Captain, that you would like to state concerning which no questions have been asked? If you have anything you would like to state, we would be glad to hear it. My impression is that you were summoned here to speak particularly of Campbell's death and the manner in which it occurred.

A. That's about the only thing that we feel that there was not the proper care taken in, and that was the hospital department. The very name of the First Division hospital sent a shudder through the men, and nobody went there who had the money to go down to Chattanooga, and none of the officers went there.

Q. Do you know whether there was any improvement in the hospital at that time?

A. No; I don't think there was much improvement. It seemed to me bad. I went over several times and everything had the look of uncleanness.

Q. And was it known to you in any way by rumor or otherwise that the medical director of the camp, Dr. Hartsuff, had gone and taken possession of the hospital himself and had revolutionized it? Did you hear anything of that while you were there?

A. No, I did not hear anything of that. I know that the men came back with very bad reports of the hospital. They claim that over there men were dying without anybody about them. I don't suppose it does any good to cry over a man when he dies, but I know of two instances where men were looked at by the surgeons who looked as if dying and were left by the surgeons without anyone with them. The men complained of that. They had seen that happen on either side of them while in the hospital.

Q. And they thought it would have been of some comfort to the men to have some one there?

A. Yes, sir; some nurse or some one, and some regiments, I think, were unfortunate in having poor regimental hospitals and poor division hospitals, and I think the men as a rule will not condemn anything unless it really deserves it. They speak of the hospital men at Fort Thomas, Ky., and some men at Fortress Monroe—speak in the highest terms of the nursing and attention. They said everything was done to make a person comfortable.

Q. Had you any experience with your division hospital after the female nurses came there, or did you have any female nurses?

A. There were none there at the First Division hospital until that hospital was broken up, about the 1st of August, I think.

Q. I suppose there were female nurses both at Lexington and Fortress Monroe?

A. At Fortress Monroe they were in the general hospital, and the men speak with the highest praise of the nursing they got down there.

By Dr. CONNER:

Q. You were speaking of the men in this hospital—the nurses being detailed men; were they such?

A. They were detailed at first and afterwards organized into a corps.

Q. Detailed from the regiments?

A. Yes, sir.

Q. Were any detailed from the Fifth Illinois?

A. Yes, sir.

Q. Were any men detailed from your company?

A. Yes, sir; I had five or six.

Q. What was the character of the men that you had detailed from your company?

A. Well, they were very good men as a rule. They were good in character. I don't know anything of their experience as nurses.

Q. Were the details made under your direction or under the direction of your colonel without you being consulted?

A. The men that were detailed from my company originally belonged to the hospital corps of the old National Guard regiment, and they were transferred as such.

By General BEAVER:

Q. Had they had any training as hospital corps men?

A. Well, in carrying litters they had.

Q. Carrying men in blankets, I suppose.

A. One did—one or two. One man went over, but he did not serve in the division hospital. He was a young dentist, and he had taken a course in medicine in Chicago, but he was sent down to Porto Rico.

By General McCook:

Q. How old were you when you went into the National Guard?

A. Thirteen years old. I went in in 1886. I was a precocious youth and quite large at that time.

By Governor WOODBURY:

Q. Please give the name of the surgeon of your regiment.

A. Maj. Milton S. Keeley.

By General BEAVER:

Q. The Keeley-cure man?

A. He is a cousin; Dwight, Ill.

Q. Captain, you have already said you did not know whether or not the hospital authorities investigated the circumstances attending the escape of Campbell. Do you know whether the colonel made any effort to have it investigated?

A. No; I do not know anything about that. Shortly after young Campbell's death we were ordered away. We did not, however, get away, and everything was excitement and we were turned back, I suppose—you have probably heard of it—to favor another regiment, and I spent all my time trying to set things right, trying to get away from the park, and I did not take any notice of that, as I had very little sickness.

Q. You made no objection to the Adjutant-General's Office?

A. No; I did not do that. His father at one time was adjutant of our regiment, and when he was down there he spent most of his spare time at headquarters, and whatever they did over there he attended to it, and I left everything in his charge, because he was well acquainted with all the circumstances.

Q. Did he make any complaint to you to be forwarded through official channels in regard to this matter, so it could be investigated at that time?

A. No.

Q. And you made no representation through the adjutant's office in order that it might be investigated at the hospital?

A. No, sir; I did not.

Q. If that had been done it would have been somewhat easier to fix the responsibility than now, would it not?

A. Undoubtedly it would have been.

By Governor WOODBURY:

Q. Do you know how long after the escape of this soldier from the hospital it was before his absence was noted?

A. The nurses claimed that they discovered him gone. I believe one nurse coming through there found he was gone, if I remember rightly, and they found him,

Mr. Campbell stated—he investigated the matter himself and published a big account of it in an Illinois paper—he said they found him two hours afterwards.

Q. Do you know how long after he went away his absence was noted?

A. They just found he was gone.

Q. I mean how long after he went away before they found he had gone; I mean how long after he left the hospital?

A. It seems that the nurse coming through there found he was gone. Probably he had not been gone a great while.

Q. How long after was it that they found him?

A. Two hours.

Q. How far was it from the hospital?

A. I do not know how far away.

Q. Do you know whether or not it sometimes happens that delirious patients escape from other hospitals and private houses?

A. I guess they very likely do. I do not know.

WASHINGTON, D. C., *December 20, 1898.*

TESTIMONY OF MAJ. GEN. WILLIAM R. SHAFTER.

Maj. Gen. WILLIAM R. SHAFTER then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By General BEAVER:

Q. You have given your name and rank to the stenographer?

A. Yes, sir.

Q. What was your first service in connection with the Army in the war with Spain?

A. It was to assume command of the troops at New Orleans, and I should say about the 22d or 23d day of April of this year, perhaps the 24th.

Q. What troops were assembled there; any considerable number?

A. Not a large number; six or eight regiments.

Q. How long did you remain there?

A. Only two days.

Q. Do you know at whose request you were assigned to command at Tampa?

A. I have been told, sir, by General Miles; that he recommended me for that command.

Q. In the correspondence furnished by the Adjutant-General to us for our information it appears that on the 29th of April General Miles requested that you be assigned, or be directed, upon your arrival at Tampa, to assume command of all the troops then assembled there. Was it in pursuance of the order which came from the Adjutant-General that you assumed command at Tampa?

A. It was.

Q. We will probably get a better understanding of what occurred at Tampa and subsequently if you will give us in narrative form your knowledge, as you can best recall it, of what happened in connection with the organization of the expedition, its sailing and landing, having special reference to the various departments of the War Department which we are sent to investigate; that is, the Commissary and Ordnance departments and the Signal and Medical departments—all the other departments.

A. Of course you understand it is impossible for me to recall dates accurately

without referring to orders. I can give you, however, very closely, and if you will let Colonel Miley correct me if I make a mistake as to dates, I will do so.

Q. Certainly; and you can refresh your recollection from any memorandum you have.

A. My first order on going to Tampa was to organize an expedition and reconnaissance in force to go around the east or west end of Cuba, as I thought best; go to Santa Clara province, get into communication with General Gomez, ascertain what troops he had with him, and what aid we might expect from him; supply him with such arms, ammunition, and clothing as was possible, and avoid a conflict, if possible, with the Spanish troops. That plan was stopped two or three days later by the appearance of Cervera's fleet in Cuban waters. Immediately after that I received orders which I have here—

Q. General, just state how many troops were expected to be embraced in that expedition which you spoke of first.

A. I was told that I could take five or six or seven regiments of infantry, a regiment of cavalry, mounted, and such artillery as I thought best. I had intended to take about 5,000 infantry and a regiment of cavalry and a couple of batteries of artillery, or, if short of transportation, possibly only one battery, because I knew perfectly well and I understood that there was no means of landing except in small boats, and any artillery put ashore would have to be left there, as it was hard to get things back after putting them on shore. Immediately after the appearance of this fleet I was ordered to prepare an expedition to seize the port of Mariel, 26 or 27 miles west of Havana, and make an intrenched camp where the greater part of the Army, the Regular Army, could remain until the volunteers could come down, and from there make a campaign against Havana. That was being prepared as rapidly as possible when suddenly there came the notification that the fleet of Cervera was in the harbor of Santiago, and I was then directed to proceed, with the expedition I then had intended to go to Mariel with, off the mouth of the harbor, land either to the east or west, as I thought best, and assist in capturing or driving Cervera and his fleet to sea, and capture Santiago. Those were my instructions, and they were never varied from, and it was from those I acted.

Q. Now, as to the size of the expedition—was that fixed in orders or were you allowed discretion in that?

A. I was allowed discretion. I might say we were loaded once, about the 9th or 10th, I think it was—no, on the night of June 7 we received the orders, and on June 8 we were all on shipboard and started out of the harbor, and just outside we were to form the ships in proper order at sea and have the convoys take charge of them, when I received a telegram to stop and recall my ships—I will get you that telegram—and so I sent a tug down and called them back.

Q. That was on the 8th of June?

A. Yes, sir; I think so. A few moments later I received another telegram stating, as the reason why I was recalled, that within 500 miles from there some Spanish ships were sighted—seen in the St. Nicholas Mole. The men were brought back, and it was very hot and the ships were put alongside the wharves and the men were allowed to go ashore. In fact, from that time, the 8th, until the 13th, when we got orders to go away again, they were given every facility for bathing and going ashore. I also took most of the mules and pack trains off and put them ashore. Then later, on the 13th, I suddenly received orders to proceed at once, that there must be no delay, and that I was to start at once, but with not less than 10,000 men. The order stated that the fleet would sail under strong convoy without regard to the Spanish ships. As I say, the animals were all on shore now, and many of the men, and it took longer to get the animals on board again than it did the men, and by the time I got the animals on I had the transports all loaded, except the *Florida*—that had about 1,000 men—and I then had a little less than 17,000 men, and with those we sailed away. The fleet sailed away on the 14th.

Q. At what date?

A. The 14th.

Q. General, to what extent was your command supplied with commissary, ordnance, quartermaster's, and medical supplies?

A. I can not give you the number of rations put on board, but it was supplied most abundantly. My orders were to take in sixty days' rations, and I got in for about six months. You understand, I had nothing to do with the commissary stores except to tell him to load them. The chief commissary loaded them, and my orders to him were to load some on each ship, and to load full rations, so that if a ship was cast away the men on her would have full rations. That was done as far as possible. In a few cases some ships came from New York, and it was impossible to unload those things they brought and distribute them around from ship to ship. There was a great quantity of rations, sir.

Q. How was it as to the clothing and tentage and camp equipage for the men of the command—had you abundance of those things at Tampa to be loaded?

A. We had a fair supply of tentage; the men were all supplied with shelter tents. A great deal of the tentage was put on board by the regiments, but it was never taken off, or not until the campaign was over. But such tentage as they needed in the active campaign they had. The clothing was such as is supplied to the Army. I think blue clothing is better than that khaki stuff, but that is a matter of opinion. They had plenty of the ordinary blue clothing. The lighter clothing did not come down until later, when some 20,000 suits came down at, I should say at a guess, about the 20th of July.

Q. When you say the "lighter" do you mean the lighter flannel or the khaki?

A. The khaki.

Q. Was there any extra clothing issued to the men other than what is issued usually, the double suit of underwear?

A. No, sir; these men were the regular troops, except three regiments. They had orders what to bring with them. Some of them went on board their ships the day they came there.

Q. Do you know whether there was any quartermaster's stores taken in bulk, such as clothing, to be issued after you reached there?

A. I can not tell you the amount, although we have a bill of lading which will show exactly what we had on board. My recollection is that there was a simple quantity of clothing, as we did not expect to be there long. Here is General Humphrey's list [handing paper].

Q. He is coming here as a witness; you need not trouble about that now.

A. I did not answer about the medical stores.

Q. Then proceed with them.

A. You know the medical supplies of the Army are the one thing that the commanding officers and line officers have nothing to do with. The requisitions of the surgeon are never seen by the commanding officer of a post, and in the years I have commanded I never saw or signed a medical requisition for medical stores. The doctors know what is wanted and they get it. I can only know from asking the surgeon and from what he told me. But as to saying what was on board, I do not know.

Q. From the information you had, had you reason to believe your expedition was supplied with medical stores and hospital supplies for a campaign?

A. Mainly, yes. The Doctor told me the supplies had been used up in Tampa much faster than he expected, and the supplies purchased for taking with us had been issued to the volunteer regiments, and in some respects our supplies were short, and my ship was detained until a train with two cars of medicines that had been sent down by express arrived, which was about 2 o'clock in the morning. And they were unloaded and brought down on board, and the doctor took them.

He expressed no doubt but that we had sufficient for the temporary purpose for which we expected to be there. It turned out he was mistaken, sir.

Q. Was there any difficulty in the way of ordnance stores?

A. None whatever that affected my expedition; but there were ordnance stores, belts and such things, that had been purchased in the open market which were abominable.

Q. As to ammunition for the infantry and artillery, what did you have?

A. Five hundred rounds per man.

Q. So there was no lack of that?

A. Ample.

Q. General, to what extent had you knowledge of the arrangements upon the transports for the shipping of troops? How did you acquaint yourself as to the capacities and facilities of the transports for the transportation of troops?

A. A board of officers had been convened and instructed to inspect every ship, and make an inspection of the charts of the ships which the company furnished with them, and Captain McKay, an old ship man, said some of them would not carry as many as they said. Then I detailed a board, consisting of General Lawton, the senior member, Colonel Humphrey, and Captain McKay, to inspect every ship, see what arrangements had been made for the cooking of the men, for making hot coffee, and see about the sinks, and see about how many men should be put on each ship. They did that, and upon their recommendations the ships were loaded. They made all arrangements for the troops traveling to make hot coffee; the troops were traveling with travel rations, and barrels were used connected with steam pipes, and the steam could be injected into them to make coffee. In a number of cases the closets were found insufficient to accommodate the number of men to be put on board each one.

Q. What prearrangement had been made for the embarkation of the men as to the vessels upon which the several organizations should go?

A. That was all arranged in advance, and the chief quartermaster was directed to see that the men were loaded upon the ships assigned to them. Whole organizations could not always be put on a ship; sometimes two companies would go on a ship with another regiment, but in no case were companies broken up. Regiments were sometimes split in two. Humphrey had the capacity of each ship in men, and it was his duty to see that the men went on board the ship they belonged to, and he gave me every day, or beforehand, the list of the ships and the regiments that would go on them. These lists I have here are simply about the order of the loading.

Q. We examined Captain McKay, and he submitted a statement showing what regiments were to go on the different vessels. He told us he had that in his hand and his pencil memorandum made at the time—perhaps a few less went in the return of the regiment—but he had a pencil memorandum on the edge of the order.

A. He was the man. He had that in charge under Humphrey.

Q. Were any complaints made to you, General, by any of the commanding officers of the several regiments as to the difficulty in finding the vessels upon which they were to go?

A. Not that I know of. Not that I recall. You understand—have you been there at Tampa?

Q. No; I have not.

A. It is a narrow strip of land there with only one track, and bringing the men down on the trains it got pretty thick with men stacking arms and breaking ranks; that would naturally make them mingle; but they and their officers knew where they were going, and that was the only confusion—and that was not confusion.

Q. To what extent, so far as you had occasion to observe, or so far as you had official attention called to the matter, were the troops comfortably carried in these transports?

A. General Beaver, they were comfortable from the fact that we had fine weather. There were too many men on board those ships, and I knew it when they started; but you know how men are about going. It was almost a personal insult to those men left behind; everybody wanted to go, and I did take some chances, which, as there was no storm, did not result disastrously.

Q. You would have regarded the transports as being somewhat crowded in view of the chances you took?

A. I do not hesitate to say so. I did take chances, because I wanted to take as many men down as I could.

Q. Do you know what the reported capacity of the vessels which were assigned to your expedition was?

A. I can not tell from memory. I can tell you how many they carried; they carried 17,000.

Q. The reported capacity—

A. The contracted capacity, when they engaged themselves to the Government, was considerably in excess of that. They said, I think, 25,000 men. With one that was disabled, and one that went off somewhere, it was thought we could carry 30,000 men.

Q. As a matter of fact, when you had the ships examined by experts that figure dwindled 25 per cent?

A. It dwindled somewhat. I could not say 25 per cent. Had they been put on board with plenty of room for the men in case there was a storm and they had to go below, it would have dwindled more than 25 per cent.

Q. What stores, if any, were left behind which were essential to the comfort and safety of the Army?

A. I do not think there were any, sir, unless you would say that of a limited supply of medicines. There was nothing left behind that was there. The medicines were not there.

Q. What as to ambulances?

A. Now, as to ambulances, I do not hesitate to say they were loaded according to my orders. I put them on board myself and directed the quartermaster how many should go and as to the number of wagons. In the light of later events it would have been better if I had taken off ten or fifteen wagons and put on ten or fifteen ambulances; but when we came to the last day I asked McKay and he said the ships were loaded and I could not get them on; and as I said before, hindsight is better than foresight, and I did not know I would have 1,500 wounded, and I see it would have been better to have had ten or fifteen ambulances to use on the first day; but on the 26th ten or fifteen ambulances came down; but I will say now that I do not think any single man suffered by taking him on a wagon instead of an ambulance when the road was rocky and muddy such as it was. It is as easy to ride in a wagon as in an ambulance.

Q. In the light of your experience you do not regard that now as a serious mistake?

A. No, sir; I do not regard that as a serious mistake.

Q. Because, as you say, the wagons answered the double purpose and you needed all the wagons?

A. Yes, sir. There were three or four that had broken parts or were broken immediately. It would have been better to have 15 more ambulances there the first day, but we did not have them and we did use wagons. I am responsible for their not being there, but we would have had to take 15 wagons less.

Q. Now, General, as you are aware, there has been a good deal of comment and controversy as to the means provided in advance for your landing. Will you please state what was done in that regard, and what might have been done, if anything, and what the results proved as to the adequacy of the means taken for debarkation?

A. We had the ships' boats. I knew then just how many there were to each ship and what the capacity was. I think we had a capacity for 3,000 men in boats.

Q. Captain McKay in his memorandum said 3,400, including the lighter *Laura*. That was made in advance, was it?

A. Those were the boats that belonged on the ships, and for lighters we had two that were proper lighters, the *Laura* and one that we supposed was coming, but which broke down and never made an appearance. I purchased, at a cost of about \$6,000, two new barges that had tremendous capacity. They were nearly as large as this room; they were as long and about as wide as that picture—say, 30 feet long and 15 feet wide, and built up 3 feet, so they could carry artillery. They were the only two there we could have, and I purchased those. Then we had a tug that skipped, fled—the fellow deserted on the way down—the *Uncle Sam*, or the *Captain Sam*, or some such name; he left. The second night out one of those barges was reported in the morning as lost. We were then in the midst of a sea, and there was no use talking about going back; we had to go on. Then we had two ships that carried stevedores, the *Manteo* and the *Cumberland*. They were light-draft vessels, 6 feet in front, and we could run up to the pier and unload with them. Then I had been informed that all the boats of the Navy were there and would assist in the landing. I deemed that sufficient. At any rate, there were no other tugs there to be had, and I had no authority to send off and hire tugs. The Quartermaster's Department was doing that part, and I was informed, and have every reason to believe, they got everything they could there.

Q. General, have you ever had any such letter as this from the Department:

NAVY DEPARTMENT, *Washington, May 31, 1898.*

SIR: This Department begs leave to inquire what means are to be employed by the War Department for landing the troops, artillery, horses, siege guns, mortars, and other heavy objects when the pending military expedition arrives on the Cuban coast near Santiago.

While the Navy will be prepared to furnish all the assistance that may be in its power, it is obvious that the crews of the armored ships, and of such others as will be called upon to remove the Spanish mines and to meet the Spanish fleet in action, can not be spared for other purposes, and ought not to be fatigued by the work incident to the landing of the troops, stores, etc.

Very respectfully,

JOHN D. LONG, *Secretary.*

The honorable SECRETARY OF WAR.

A. No, sir; that is the first time I ever heard of it.

Q. There is no intimation here that that was communicated to you?

A. No, sir.

Q. You were acting on the supposition that the Navy would cooperate with you in the landing?

A. Yes, sir; just as they did with their little boats.

Q. But, if this had been communicated to you, would it have made any difference to you in your preparations for landing?

A. No, sir; I can not say it would.

Q. The question has been raised in my mind, and I do not know to what extent it would have been possible. But would it have been possible in your department to have had any of the life-saving boats from the stations along the Atlantic coast?

A. That is a question beyond my jurisdiction.

Q. It would have been a matter of negotiations between the War Department and the Treasury Department?

A. I do not know, sir. We had enough, I think; and I think the result in getting ashore showed it.

Q. Had you any assurance, or did you simply presume it would be so, that the navy would cooperate in the landing?

A. I am quite sure that I had a notification that I would be assisted in the landing, and I never had any doubt we would be assisted, as we were for the same Government; and I thought they would give every assistance, and they did. They wanted their own way about it, as I did sometimes, but, nevertheless, they turned in and helped.

Q. I have some recollection of something of that sort in reading over this correspondence. You had no intimation—or had you—that the navy would not assist you?

A. Certainly not. I knew, however, that they had nothing that was suitable to load heavy artillery on, or horses, perfectly well, and I thought we had something to take them off with ourselves. We did have. It was a little slower, having lost one of the barges. The horses we threw into the water and made to swim ashore.

Q. Where did your expedition land, and under what circumstances?

A. It landed the Second Division and the cavalry division, and the artillery and the cavalry landed at Daiquiri, and the First Division and the Cubans landed at Siboney. Siboney, as you understand, is 8 miles nearer Santiago than Daiquiri; it is a little indentation in the coast with a sand bar—an open harbor; while at Daiquiri there was a little wharf about two-thirds as large as this room, having about 6 feet of water on its front face and a little tramway along the bluff. It was built in close to a bluff to be protected from the waves.

Q. Where did your cavalry and artillery disembark?

A. At Daiquiri; the wagons were all taken off there.

Q. How long was that division in making its debarkation?

A. Why, three hours; perhaps a little longer; 6,000 men off the first day.

Q. Did they meet with any resistance?

A. None whatever.

Q. Did you expect to meet any, General?

A. Yes, sir; I did; and there were Spanish troops in the town of Siboney when we approached it; but the navy, per agreement with me, on the 20th shelled the town and drove them out, and of course they did not know where we were going to land until we approached the town. Whatever troops were there set fire to the buildings and the wharf, but it was too wet to burn. I had arranged for 1,000 Cubans to be at the head of the canyon there and capture them as they escaped, but they did not show up.

Q. You had made arrangements for that?

A. Yes, sir. I have the plan or arrangements there.

Q. Where were these Cubans to come from?

A. From a place 5 miles away; 500 Cubans came from Acerraderos to join General Castillo, who had 500 men, making 1,000 with him. They were on the morning of the 22d to be at the head of the little ravine at daylight, and there was a little creek that went back about three-quarters of a mile, and then you go into a dense undergrowth, and then there is a broad open plain; and I told them to be there and catch them, as the navy was going to shell them out; but they got there three hours late.

Q. Your plan was to have the navy shell them out and have the Cubans capture them?

A. Yes, sir; and they ran as soon as the vessels approached the shore. I understand there were about 300 of them. I was told to expect a great many more.

Q. And you prepared, in your judgment, to meet a great many more, did you?

A. Yes, sir; I thought we could land under the navy fire, no matter what they did there.

Q. General, to what extent were these transports provided with men to row the boats belonging to the transports to the shore?

A. They were very illy provided for, as I found when we undertook to use them,

and the soldiers themselves rowed a good many ashore, and the navy was there with its launches, and they pulled the boats in strings of five or six ashore at a time. I am not a seafaring man, and I had no idea how low the steamship companies furnishing the transports had cut down their employees. When it was brought to my attention I saw it was with a view to more profit to the owners that this was done.

Q. In making your provisions for disembarking you regarded that as a factor in doing it, and did you rely upon the transports to furnish the men to man these boats?

A. Yes, sir; that is necessary; but the plan of loading all the boats of each ship and then fastening them by ropes one to another and have the navy launches run a string of them in was the best and quickest way. I left that matter to the navy people's judgment, because they knew something about it and I did not—that is, technically I did not know anything about it.

Q. Did you land at Daiquiri or at Siboney?

A. At both places repeatedly; but the time I landed and did not go back again I landed at Siboney. I was ashore two or three times a day—half a dozen times a day, perhaps.

Q. Did you land with the cavalry, artillery, and troops the first day?

A. I did. The artillery and cavalry did not land until the second or third day.

Q. The Las Guasimas fight occurred on what day?

A. The 24th.

Q. Was that part of the campaign or simply an incident of it?

A. Simply an incident of it. In moving the troops out to place them in a temporary camp until supplies could be put ashore—I wanted to get into as good a camping place as possible, and yet not go far from shore, as the men had to go back and carry their rations up before we could get the wagons and mules and harness on shore or the pack mules loaded—they were the first to go on shore; they were to go just beyond Siboney and select a camp where it was safe. Recollect, we were on a shore where the captains who had sailed there were in continual fear that a storm or hurricane would come, and I knew that if a storm came we were gone, as there were no cattle to round up, and for that reason I stayed on my transports, leaving to General Wheeler and General Lawton and General Kent the other. In doing that, General Wheeler's men came in collision with the outposts at Las Guasimas, and he attacked them and whipped them; and while the matter was not of great importance in itself as to the men killed or captured, still it did teach them that they had different men to fight than they had been accustomed to, and I know they had concluded that they had different men to fight than the Cubans were.

Q. The moral effect was good?

A. It was excellent.

Q. The effect of it in the end was good?

A. Yes, sir.

Q. What difficulty had you, if any, in supplying your command after you started upon the campaign proper?

A. Well, sir, that was the only difficult problem of that campaign. It was simply to get the bare necessities of life to those men, and it taxed them to the utmost, the pack trains and all—the bare bread and sugar and coffee.

Q. How many pack mules had you?

A. Eight times sixty, five hundred and forty; we had five at first and then three pack trains came a few days later; fifty pack mules to be laden, and eleven, including the "bell" and the "nigher," for the packers.

Q. How long did it take to land the stores after the troops were off?

A. They began the same day. Ammunition was the first to go ashore—this is at Daiquiri—ammunition and rations, and later forage, and that was continued

just as long as they could. They could not work at night, and sometimes they were interrupted in the afternoons. The troops marched to Siboney, and we saved 8 miles of beastly road, for we began to unload at Siboney, and there nearly all the rations were taken off by the *Laura* running close to shore, and the men then carrying them. The engineers built a little pier there which stood longer than anything else ever stood there. The railroad company there built or tried to build two long iron piers there, and after the two trials they built twenty-odd miles of railroad—

Q. And your engineers built a pier that lasted?

A. Yes, sir; it lasted as long as anything had. There was a lot of railroad timber there that was used, and we had a shipload of engineering material.

Q. You regarded, then, your landing of both troops and supplies as entirely satisfactory, General?

A. I did, sir. We lost less than thirty animals. If you have ever tried to swim mules in a stream, you know how hard it is to get them to go the way you wish them; well, a few of them swam out to sea and were lost, and a few got too far down the shore and were dashed on the rocks; and there were two men who landed late in the afternoon, and the waves coming in to shore when they landed, it being dark, they fell overboard, and as they had their carbines and 100 rounds of ammunition, they did not rise; and although they were picked up in a few minutes, they were dead. Those were the only casualties in landing a little over 20,000 men.

Q. General, there has been considerable complaint on the part of the medical officers as to the failure to land their supplies. Were any complaints brought to you in regard to that officially?

A. About the second day after the troops were on shore I learned by some one coming off, or by some one on the wharf looking for his medicine chest, that he had not taken his regimental medicine chest with him; that it had not been taken ashore. It is a box about this size [indicating a small hand-satchel]—of about the capacity of that. I instituted inquiries after I heard that the regimental medicine chests had not gone ashore, and I found that a majority of the doctors had left their regimental supplies on board. It was too late then to do any talking, and so I had Dr. Goodfellow, of Colorado, who was there to see what he could, take charge of the *Manteo* and go around to the various ships and bring those boxes ashore; and the instant I had four four-mule teams on shore they were turned over to the medical department to draw these chests up to the front and give them to the troops. And now, in addition to that, there were some supplies of medicine in bulk on the *Segurança* which were not unloaded for about four days, when they were taken off at Siboney, by which time the medical supplies were very nearly exhausted, as I was informed by the Doctor.

Q. What was done with those supplies taken off at Siboney?

A. The Doctor distributed them.

By Colonel DENBY:

Q. Did you get all the medical supplies off that the doctors had?

A. I think so.

Q. The testimony seems to indicate that some of them went back to Tampa.

A. I could not tell absolutely; some boxes may have gone back, but not to my knowledge, and from the fact that the Doctor was then very short of medicines, I doubt very much that any did go back, unless it was on some of the ships.

By Dr. CONNER:

Q. Do you refer there to Dr. Pope as the "Doctor?"

A. Yes, sir; I refer to the medical director.

Q. Now, General, with regard to the difficulty of conveying supplies to the men

at the front. When did that difficulty begin? How far were they from the coast before you experienced great difficulty in supplying them?

A. Well, the difficulty in supplying them began immediately upon their landing. They landed with three days' rations on their persons. It was impracticable to keep those men at Daiquiri; it was necessary to string them out on the road to where we were going and get them beyond Siboney. Daiquiri is where the wagons were unloaded, and for the troops that for the first three days were supplied, some had gone beyond Siboney and were 12 miles away now. The moment we began unloading rations they were only 3 miles away, but the difficulties began at once because it taxed the transportation. You know how hard it is to take wagons to pieces and then to set them up afterwards on the shore. They were naturally taken to pieces, and the mules were taken ashore, and there the wagons were rigged up again and the mules hooked onto them, and all was started soon.

Q. We have had a pretty full account from the commissaries, and so we will not go into that.

A. You know I had to feed a great many more people than we had in our army. We were issuing about 40,000 rations at a time when we had but 20,000 men.

Q. So the mouths to feed were nearly double your army?

A. Yes, sir; people we could not see starve.

Q. Who were they?

A. According to the best estimate there were from 18,000 to 20,000 women and children and men who came out from Santiago on the 5th and 6th days of July, and there were something over 5,000 soldiers that I fed. The ration returns call for a few more than 5,000 Cuban soldiers that I fed, and, in addition to that, two or three regiments of volunteers came up; so that I had a little less than 20,000 United States soldiers, 5,000 Cubans, and about 16,000 refugees and others, making about 41,000 or 42,000.

Q. Where were these refugees from Santiago in reference to your base of supplies?

A. They were about as far away as they could get; they were on my right and rear. Those were mostly the Cubans, and they mostly went down to Siboney; and from there they were obliged to go up into the hills to the old deserted mines, where there were some houses.

Q. Then your transportation for supplying these people was taxed to the utmost?

A. Yes, sir; and especially after those terrible rains.

Q. Had you anticipated this tax upon your transportation before leaving?

A. I had not, sir; no more than I had expected the great number of wounded we had. I had no idea we were going to have 1,500 men wounded; I did not think we were to have so severe an engagement. We had been led to believe the force at Santiago was very small.

Q. I do not know that it comes within the scope of our inquiry, General, yet perhaps it is not altogether irrelevant: Were you led to expect the strenuous opposition the army met in your first engagement?

A. Well, they made a most desperate resistance. I had no idea we could walk over the trained troops of Spain without a fight. They fought longer at El Caney than I thought they would, and they made a desperate resistance—much more than they would have made had they supposed they would be treated as Christian people treat prisoners.

Q. Now, General, will you give a narrative of the engagements which led to the final capture of Santiago and the surrender of the enemy's troops?

A. Of course no one can quite explain how his mind is moved, but I will tell what I did as I can. We arrived off Santiago about noon of the 20th. I was met by an officer of Admiral Sampson's fleet, and with my own ship I went down to where he was, and the proposition was made that we meet General Garcia at

once, as I desired to get from General Garcia some information relative to the topography of the country. We had no maps on which to base the campaign. We went down to see Garcia, as it was said that Garcia could not come off to see us on a ship, as it made him very seasick. That afternoon we met at General Rabi's place, and after a consultation of an hour, in which I questioned them and had my judgment confirmed that the place to land was to the eastward, and I saw towns or villages as I sailed down, and saw that they had communication with the interior from that fact, and to the westward there is no sign of habitations, and also from consultations with Dr. Castillo, a former surgeon in the Navy, who had been brought up about midway between Santiago and Siboney, and who gave me the lay of the land and how the creeks ran, and General Garcia confirmed me in that view that it was best to land to the eastward. Immediately upon concluding our interview I had Colonel Miley take down a memorandum as to the plan of operations. Admiral Sampson heard it and said he would assist me in every way possible, as he did. This is a note on the conference between General Shafter and General Garcia. They told me there were about 12,000 Spanish soldiers in Santiago and vicinity; that they can concentrate about 4,000 men on the west at any moment within a few hours. I made the proposal that I would make a feint of 3,000 or 4,000 men at some point west of Santiago and then land the expedition at Daiquiri and march on Santiago. The plan proposed was for General Castillo to have 1,000 men at Daiquiri while the navy bombards, and they were to capture the escaping Spaniards. "Then General Shafter said he would have the Navy bombard, on the morning of the 22d, Daiquiri, Aguadores, Siboney, and Cabanas as a feint, and land the whole expedition at Daiquiri, and I was told to expect about 5,000 Spaniards between the city and Daiquiri. General Garcia says Daiquiri is the best base and General Shafter adopts it. General Castillo said the forces were as follows: Force at Daiquiri, near the wharf, 300 men; at Siboney, 600 men; Aguadores, 150; Justici, 150; Sardavera, 100 men. It was then decided that General Castillo will take on board the transports 500 men from Acerrederos, to be landed at Tajababo, 8 miles east of Daiquiri, to be joined to his command of 500 already there, and with these 1,000 men he was to be at Daiquiri and assist in landing on the morning of the 22d. General Rabi will, on the 22d, make a demonstration at Cabanas with 500 men, while the navy shells the place; he was at Acerrederos. It was then decided by General Garcia to bring his men, 3,000 or 4,000 strong, from his camp near Palmas, 30 miles in the interior, to Acerrederos, and be ready to embark on the morning of the 24th on the transports, and then be taken to Daiquiri to join me. On the 21st the navy was to transfer 500 men to Tajababo under Castillo; and 500 men under General Rabi were to make a demonstration against Cabanas on the morning of the 22d." That is a copy of the notes taken at the time; it was taken by Admiral Sampson's secretary, or flag lieutenant, or whoever he was, Captain Stanton; and upon that we acted. The navy, as I told you, bombarded those places on the morning of the 22d, and I landed.

I had made up my mind before we reached Cuba that whatever we did at that season had to be done very quickly. I had been in the yellow-fever country and knew that no matter what precautions were taken men would get it and other fevers, and it was only a question of the strength of the command which would decide how long they would last, and for that reason the transports were pushed out immediately. I intended to go as far to the front as I could, until we met decided opposition, and then to make an attack. On the 30th of June we were against their pickets in front of Santiago. As I told you, there were no topographical maps of the country; I had my engineering officers and some other young officers, six bright young men, out each day making maps of the country and getting the topography of it, but it was simply a dense mass of brush, and you had to cut your way through, and although it was possible to get the course of the

streams, it was impossible to move an army through there. We did know the course of the streams, and knew it was as difficult for the enemy to attack us as it was for us to attack them. Looking at the lay of the land and knowing there was but one road on which we were going, I directed General Wheeler to send some men, while we were waiting at El Caney, to make a reconnoissance there, as I had no idea there were troops there, and have them come in by converging roads. He did that; and in addition Lawton and Chaffee made a careful examination and found in consequence that there were troops there; and after consultation with Lawton and Chaffee on the morning of the 30th they said they could capture that place before 9 o'clock in the morning. I intended to send Lawton for that purpose, and let the main attack, which I would do on the El Poso road, be at 10 o'clock, and I thought Lawton at that time would be on the way to Santiago and would get into the fight very soon after it had started on the eastern part of the town, and the only line of retreat from the town was to the north. They could not get out at the south, because there was the sea. On the afternoon of the 30th I sent to the division commanders, General Sumner, of the cavalry division; General Wheeler was ill, although he got up later; General Kent, of the First Division, and General Lawton, and gave them my orders, which was that Lawton was to move on the night of June 30 and to make an attack at daylight, which he did; and then, as soon as he could be disengaged there, he was to turn back to Santiago, join Wheeler on the right, and go in. The cavalry division under Sumner and the division under Kent, were to go down this one road, a narrow road, not over 6 feet wide at the widest place—it was wider than 6 feet at the widest place, but that was the main width of the road—a column of fours only could go down, and when they crossed the stream the cavalry was to go to the right and the infantry to the left, and then form their lines for an attack. The enemy there was only 600 yards from them. That was done. We began shelling El Poso at 9, and about 10 the attack was started. I had given instructions to Colonel Miley, and called him in that night, the night before, to see if he understood my orders, which he did. The men were under the fire of these Mauser rifles, and although the order had been not to attack until they heard the guns at El Caney, to show that Lawton was well engaged, when they started down that road there was nothing else to do but to go ahead and attack with those two divisions, which was done, and they carried that hill, with very little loss, in two hours. By 4 o'clock they had the intrenchments and the Spanish running, and the city of Santiago was close in front—within rifle range. I stood on the hill, or sat on my horse on the hill, and about 2 o'clock I was fearful I had made a terrible mistake in engaging my whole army at 6 miles intervals, and I sent word to Lawton to come to Wheeler's right and help there, but before the time my messengers got there the men had started and they could not be brought back, and by that time it was night and my men had captured the ground in front of them and they had nothing to do but lie there and intrench themselves, which they did. It was a march of several miles, and early in the evening Lawton ran into some pickets and he stopped and sent word back to me to see what he would do, and I told him to go back the way he had gone in the morning, get behind Wheeler on the El Poso road and go up with Wheeler in the morning. It was 15 miles, but those men did it, and Bates's regiment, which was sent to assist Lawton, came up on the morning of the 1st, and I sent them over to El Caney to help, but they were not used, and Bates came back and went to our extreme left—Bates's division—and there they stood and never moved any nearer on the left. They got within a mile of their front. From there to the bay was a mile; that gap was never closed; but on the right I had sent General Garcia with his 5,000 men and told him to keep a lookout for the 8,000 men we were told were coming. We knew men were coming, because the Cuban troops had been sending in word that they had had an engagement with the

Spaniards at such and such a place, and these reports kept coming in and each time they were nearer, and so I put Garcia there, with 5,000 men, to stop them. At the same time you know there were some troops at a point 25 miles north of Santiago; there were 3,446, and I had supposed there were less than 1,000. Thirty-six miles beyond that in a prolongation of that same line, at Holguin, were 10,000; in the rear of me at Guantanamo there were 7,500 and something, and they were all tried Spanish troops. I did not suppose there were more than four or five hundred at Guantanamo, but I did suppose they were going to make a fight, and it was to look out for those fellows that I had Garcia on the right. The men he was sent out to watch came into Santiago, only 2,800, under General Escario, and as the General informed me the next morning, they had come in over a new route. About noon of the 2d the last musketry firing was over, and so those men were of no advantage. In the meanwhile I had been pushing to get around to the bay, and my line was at least 8 miles, and we had, about the 4th or 5th, the town pretty well surrounded, and I was satisfied nobody could get out.

Q. Was that an intrenched line the whole distance?

A. Yes, sir; towards Santiago. At the same time, if the troops had come down, we could not have gone to the rear to fight them. It was a high ridge around the city, about a mile or a mile and a half in either direction.

Q. To what extent could you use artillery on that line in the attack on the city itself?

A. It would have been harmless. That town is simply a succession of stone cells. Although we started some shells in there and the navy did, yet we started no fires. In looking at the places where the 13-inch and the 8-inch shells struck, it would show where the room was destroyed, the windows were blown out, and so forth, and that was all. The Spanish troops were all outside the town.

Q. And you were feeding the citizens?

A. Yes, sir. To use the artillery on the Spanish troops in the trenches was simply useless. They were in little narrow trenches with the dirt thrown up in front, and it was simply a chance shot that would hit them. A rifle was as good as a 3-inch gun. I have been criticised for taking so little artillery. I knew that in all Cuba there was no artillery except what they took on mules. You can use it in the cities, but not out in the country; and furthermore, I think the only way to take those fellows was to go right on top of them.

Q. Your campaign, from the standpoint of looking backward, was in your judgment entirely successful?

A. I think so; and in looking over it afterwards I would land at the same place. It was the only place to land, and it accomplished its object. I forget—I forgot to say there were 1,000 marines and sailors on shore from Cervera's fleet, and Cervera's prize captain was mortally wounded the day after we reached the town.

By General WILSON:

Q. That is, the Spanish marines?

A. Yes, sir.

Q. They were used in the defense of the town?

A. Yes, sir.

By General BEAVER:

Q. You have said that, looking back, you regard these points as proper points at which to disembark. Are you equally satisfied as to the disposition you made of the troops and the manner in which the battle was fought?

A. Yes, sir; because it succeeded. Perhaps some one else could have taken some other course and accomplished the same results. Considering the results, I do not think the losses excessive. We lost 250 men in battle, and about 250 died of disease.

Q. Speaking of the number of wounded, General, was the manner in which the wounded were cared for brought in any way to your personal attention?

A. Yes, sir.

Q. What provision was made for them?

A. I think every provision was made for them that we could under the circumstances. Those men that were able walked back to the hospitals, and each man having his first-aid packet on him, treated himself or his friends treated him. Those who could walk then went to the hospitals—walked there and were there treated again, and went to Siboney; and as soon as the yellow fever started, they were put on ships and sent north. That there was suffering goes without saying. Men did lie out on the ground without covering, because there was not sufficient, but I do not think any died from that cause. The doctors worked like Trojans. They deserve commendation from everyone. Some were not as good as others. There were a lot of young doctors there, but you could hardly expect that old surgeons would go out on a campaign in the summer for \$100 a month. I had to take the young men, and they all worked until they broke down. They became sick just as the other men did. They worked like heroes, and there is no use saying they did not. That they got ashore all medicine they had there goes without saying, as they said they did, and I have no reason to disbelieve them.

Q. How soon did aid come in the shape of hospital ships?

A. I think there was one there immediately. I made a hospital ship myself. The *Olivette* had been made a hospital ship for the Las Guasimas men, and when the fight in Santiago began they were on board. I should say the *Relief* was there at that time, but it was only from memory—I do not know. It was necessary to get them away, because we did not want to get the malarial fever or yellow fever added to the wounds.

Q. Then the transfer of the wounded was made from your division or base hospital as soon as possible?

A. Yes, sir. The wagons came up with rations every day, and the roads were so bad we could not permit a wagon to start before 11, or, returning, start after 9, giving two hours on the road. They were sent there and cared for by the surgeons. They were crowded, to be sure, but there was good provision for them. In the light of four years' service in the war of the rebellion, they were as well taken care of, I should say, as they were then, and the wounds were a great deal less deadly.

Q. The doctors think they have made some progress since then, General?

A. Yes, sir; they have. They have stopped punching for balls.

By Governor WOODBURY:

Q. Did you have plenty of doctors there?

A. Yes, sir; when they were well. Some got sick, but they had accessions to them, and at the very last we had more than we could use.

By Dr. CONNER:

Q. Did you join with Dr. Pope in the dispatch to the Surgeon-General for more medical officers?

A. Yes, sir; I telegraphed for 40 at Santiago.

Q. But I mean at Tampa.

A. I don't remember about Tampa, but if I did it is in black and white; but I should say I did not. There was no complaint at Tampa from the doctor about the scarcity of doctors. Still I have a faint remembrance about asking for 15 or 20 more doctors.

By General McCook:

Q. That you did not get?

A. Yes, sir; there was no time to get them down.

By General BEAVER:

Q. To what extent were you served by the Signal Corps?

A. Admirably.

Q. Were you brought into electrical communication with the division commanders at the front?

A. Immediately and all the time. That is all I was looking out for. I was not particular about the telegraphic facilities back to the United States, but that was very soon completed down at Guantanamo, 40 miles east; but from Siboney to the front the line was put up and kept up, although cut half a dozen times a day.

Q. At the time the engagement was being fought on your separate flanks at Siboney, were you in telegraphic communication or telephonic communication with your division commanders?

A. Both; yes, sir, and I was in sight of both of them.

Q. Then the place for you to have been was where your lines converged?

A. I thought so and think so yet. It was about 3 miles to 4 miles to Lawton on the right, and two miles and a half on the other side.

By Governor WOODBURY:

Q. How much did you suffer from ill health while in Santiago?

A. Not very much. I was nearly prostrated on the 30th of June by the heat; I was much stouter then. I was very nearly prostrated with heat, so much so that when I would sit up it made me dizzy. I was up on my horse every day, except possibly the 3d day of July; but I was on the 1st and 2d; and then I had a beastly attack of gout, so that I could not wear a boot for a week, and had to wear a gunny sack on my foot, and I could not climb my horse, and did have to build a platform to climb up on. But I had to go around, and I would ride with one foot in the stirrup.

Q. Did you consider that your ill health, aside from the suffering it caused you, interfered with your conduct of the campaign?

A. Not the slightest, sir. My conduct of the campaign was as I planned it, except that it took Lawton all day instead of two hours to settle the fight at El Caney.

By Colonel DENBY:

Q. What would have been the effect had Lawton accomplished in two hours what you thought he would?

A. I think we would have taken the city that day. They had driven the Spaniards out and into the town, and had there been 5,000 more men in Lawton's division and 2,000 of Bates's division on the extreme left they would have taken the town, I think, just as sure as it happened; but we would then have captured only about 8,000 sick and well—just what was in the town; General Escario's troops then being 30 miles away, we would not have gotten the 12,000 able-bodied men that did surrender, and we would have had Cervera's fleet to capture, which went out on the 3d. I think Providence was on our side the first day, as it turned out. I am free to say that at this time.

Q. As a result of that you got the other men?

A. Yes, sir. Toral would have been a commanding general under arrest, and he could not have surrendered them. It cost us no more men, except that one poor captain and three or four men were killed; but as it turned out, he was at liberty to surrender with 12,500.

Q. How many Spanish soldiers was Lawton fighting?

A. Less than a thousand.

Q. How many men did Lawton have?

A. About 5,000.

Q. Were the Spaniards in a fort?

A. Yes, sir; entrenched in the strongest manner.

Q. Were all Lawton's men engaged?

A. No, sir.

Q. How many were engaged?

A. During the whole day the entire force, but at no one time were they all engaged.

Q. That was Chaffee's brigade?

A. Yes, sir; but at the final charge all were engaged.

By Governor WOODBURY:

Q. Is Colonel Miley, the officer now present, the gentleman you referred to in your testimony?

A. Yes, sir.

Q. What position did he have on your staff?

A. Aid.

By General McCook:

Q. What influence did the fight have on Cervera's action?

A. I think it drove him out. The French consul became very communicative, as some of the members of our respective families were acquainted, and he told me that Admiral Cervera told him he was going to withdraw his men from shore that night and leave the harbor that night at 10 o'clock. He did withdraw his men; his thousand men were fighting on shore; he withdrew them that evening, and he told the people in the town that he was going out to sea, and that he regarded it as very dangerous; but that some of them might escape. It was just a question of blowing themselves up in the harbor or taking the chances of some one of them getting away. They went into the churches there and had themselves shrived, as they regarded it as almost sure death.

Q. Could you have captured the ships if they had not gone out?

A. I think so.

Q. Without the navy?

A. It is a little narrow harbor. We could have fired at them with our guns, and every man could have been kept below the decks. It was within rifle range, but the infantry is not supposed to attack armor clads, but we could have forced them into the hands of the navy.

Q. What artillery had you, General?

A. I had eight or nine guns—eight siege guns, four 4-inch, and eight mortars, and—

Q. They would have been effective against ships?

A. I think so. They would not have bored a hole through much armor. It is only a matter of opinion. We did not try it. We did not have to.

Q. You are very glad you did not have to?

A. Yes, sir; I think it is a most fortunate thing.

By Dr. CONNER:

Q. Had the artillery you spoke of been brought into position?

A. Yes, sir; we had eight 5-inch guns, six batteries of 3-inch guns. Part of them were landed. Two batteries had been put back on the ship after they had gone on shore; but these batteries were at the front.

By General WILSON:

Q. The statement has been made to us in testimony that owing to the fact that the men were confined on transports so long, until they disembarked at Santiago, that the men were physically worn-out when they got there. Kindly tell us how long you expected the troops to remain on board when you went there. The next question I will ask is, How long they actually stayed there on account of this navy rumor?

A. I think the command was in as magnificent shape when they landed as they could be.

Q. The testimony of Major Marks was, as I remember——

A. What regiment?

Q. Third Cavalry. His testimony was that his men were weakened, and I think he said it was sixteen days from the time he went on board until he disembarked.

A. I can not believe anybody was on board that long. There is no reason why they should not have gone ashore.

By Colonel DENBY:

Q. Whose business is it to see that the Army has everything it wants?

A. The supply departments, each for itself.

Q. Does the supply department act for itself without orders?

A. They do not.

Q. For instance, if you wanted transports to take the army from Tampa to Santiago, whose business was it to order the number of transports? Was it yours, or did the Quartermaster's Department have to furnish them without orders from you?

A. I had nothing to do with getting the transports. They were supplied by orders from the War Department, and I was informed that all the transports we could get in that country were then engaged, and consequently I made no inquiry as to further transports. I was told that all the ships were hired that could be had for immediate use.

Q. If the General of the Army was at Tampa at the same time that you were, who was in command of that expedition at that time with regard to preparing it?

A. I think I was in command. While the General of the Army could have given any directions he chose to, and did give about some things, I did not regard him as down there particularly to command.

Q. Was it the business of the General of the Army to see that you had everything that you ought to have, or was it your own business?

A. It was my business to ask for what I felt I was short on. He advised me what to do in conversations, but he was there more in an advisory character; but of course he was actually in command of everything there.

Q. Could he have issued an order to you to do any certain thing?

A. Undoubtedly.

Q. If the War Department had issued an order contrary to an order from him, whom would you have obeyed?

A. I would have obeyed the higher authority. If General Miles told me one thing and the President of the United States told me another, I would obey the President of the United States.

Q. When you were told to go to Cuba with a certain number of men you say you had nothing to do with the transports to take those men?

A. No, sir; nothing whatever. I was told to load a certain number of men, and was given the names of the transports, and I was told there were no more transports to be had, and that it was impracticable to get more; and I did not say a word, but took what was given to me and did what I could with it.

Q. If you had only one-half as many transports as you had and you had been ordered to go to Cuba with a certain number of men you would have gone?

A. Yes, sir; the orders from the President were to depart, but with not less than 10,000 men.

Q. And you thought it was your duty to do what you did—as a soldier you thought that your duty?

A. Yes, sir; and not try to find ways not to do it.

Q. I want to understand where the responsibility was about the ambulances.

A. I will assume the responsibility of not having more than seven ambulances.

Q. A good deal has been said about your precipitating the battles or fights that took place in Cuba, and statements to the effect that if you had waited perhaps you would have done better—

Governor WOODBURY. Mr. Chairman, it seems to me we are going beyond our scope of inquiry in asking such questions as that?

Colonel DENBY. That relates to the conduct of the war.

The WITNESS. I had precipitated it as quickly as I could; I intended to, for I knew the command was going to be sick if we stayed there.

Q. And you think you did the best thing in doing it quick?

A. Yes, sir.

Q. Without regard to strategy?

A. Yes, sir; there was no strategy about it.

By General WILSON:

Q. I was going to ask you if it was ever proved that those Spanish vessels—that you had notification from Washington that they were there?

A. I simply heard talk.

Q. That they were or were not?

A. That they were not.

By Captain HOWELL:

Q. You spoke of the French consul giving you some information. Did you communicate that information to Admiral Sampson?

A. I do not think I did.

Q. I understood you to say you got this information the night before—

A. This was long after the fleet had gone out.

Q. I thought you had said you heard it the evening before it went out.

A. No, sir. I said the consul had a conversation with Admiral Cervera the day before the fleet went out.

Q. And he told you of it afterwards?

A. Yes, sir; after it was all over.

By Governor WOODBURY:

Q. How much complaint was made to you, if any, that your men had nothing but shelter tents for a long while?

A. Why, I did not know that there was any. I knew it perfectly well that they were not comfortable. I suppose 50 men asked when they would get hold of their tentage, and I told them as soon as possible; when we got into Santiago—and it was no use talking about bringing them up that road, for we did not have transportation to bring them.

Q. Do you consider this a very unusual thing, that men in a campaign of that length and under those conditions should have any other things but shelter tents?

A. I do not, sir. I think there is no other thing for men to take in such a climate. In Dakota you would have to take your tents with you to save life, but we did not use them during the civil war until we stopped, and then the tents were brought up.

Q. Did you have a good many, or any, officers in your command—staff officers—appointed from civil life?

A. I did. I had three at my headquarters.

Q. What can you state as to their efficiency or their inefficiency?

A. None of them had any previous military instructions, and would have been of very little use in attempting to use them to perform any military maneuver, but to carry orders and to distribute rations to women and children they were admirable. To begin with, John Jacob Astor was, perhaps, as inefficient as any, but he was as ready and willing to do anything and everything as anybody,

and he stood the lying in the grass and eating beans as well as anybody. Then I had a son of Senator Brice, as able as any young man I had about me. He distributed rations at El Caney, where he had to stand there with an ax helve to keep men from stealing the food given to the women and children. And my son-in-law, Captain McKittrick, was there at the latter part.

Q. Have you any knowledge of the appointments from civil life in regard to the staff appointments of the generals of your brigades and divisions?

A. I think they were an admirable lot of young men. My command was composed of regulars, except three regiments, and every officer had trained young men and used additional ones as surplus; but at each headquarters there were sufficient trained soldiers to do all the business. Certainly they had no commissary, adjutant-general, and quartermaster who was not a lieutenant in the Regular Army.

Q. I understand you to say that these men were of service?

A. They took the place of the veteran soldiers.

Q. They were not superfluous?

A. That is my observation, and I have an opinion every general officer will say the same thing there.

By General WILSON:

Q. When you got into Santiago did you find that the dynamite shells thrown from the *Vesuvius* had done any great damage?

A. I did not, sir; I only examined about half a dozen houses, where a shell came down through the roof and dug a hole about 3 feet deep and 3 feet wide and blew the windows out and destroyed the interior of the house.

Q. Are they cement floors?

A. Yes, sir; with walls 2 feet thick.

By Colonel SEXTON:

Q. How much damage did the navy do at Morro Castle?

A. I do not know, sir; but not much. The guns were over the bluff. They did dismount the guns at any time they wanted, but they would mount them again.

Q. I know how much damage they did at Vicksburg, and I wanted to know how much they did there.

A. Not a great deal.

By General DODGE:

Q. General, here is a statement sent by General Humphrey, showing how each ship was loaded and everything of that kind, that was handed to me by Colonel Miley.

A. I believe that to be absolutely correct. Humphrey is a very careful and painstaking man, and I believe that is an exact statement of the loading of each ship, but of course I do not know anything about it other than that, but I would not hesitate to testify that I thought it was.

Q. Now, on June 11, do you remember a letter to you by General Miles in relation to how your transports should be loaded, the contents of each ship stored, and the bulk of such stores and the estimating of how many wagonloads were in each ship? And then it continues: "Do the commanding officers of organizations know exactly where their supplies are? Have arrangements been made in order that if so many rations of any kind, ammunition, hospital supplies, etc., should be required, that they would know at once where they can be found?" I suppose the answer to that is this full statement from General Humphrey?

A. Yes, sir; I made inquiries in obedience to that letter. We were busy loading and it was out of the question to get that information at that time, but orders were given, as I said early in my testimony, that rations and ammunition should be loaded on each ship, so that in case they were detached they could act separately.

By Colonel DENBY:

Q. Did you regard Captain McKay as an efficient officer?

A. I regarded him as a most efficient man; I am not a seafaring man, but when a man goes about everything and makes no back steps, you don't have to have an expert opinion on him.

By Captain HOWELL:

Q. Was he an assistant to General Humphrey?

A. Yes, sir.

Q. And he understood those harbors you were going to?

A. Yes, sir; and perfectly. We had a Captain Faircloth, an older man, but less efficient.

By Colonel DENBY:

Q. Was it generally understood that Captain McKay had charge of the loading of the ships and so on?

A. Yes, sir; certainly; every one knew it.

Q. He was obeyed and respected in that capacity, so far as you know?

A. He was, sir. He was a civil assistant to Colonel Humphrey, who was the man that had charge of him, and he had been employed as a thoroughly competent man to assist. I do not think that Humphrey had ever loaded ships before. Army officers are not familiar with that work. That is the first expedition that left the United States like it, except the one to Mexico.

By Captain HOWELL:

Q. There was no scuffling to find the boats they belonged to?

A. No, sir. After we were loaded I sent a commission around again, composed of Lawton and McKay, to advise what ships should have their lading increased and decreased, and one or two companies were changed from the first estimate.

Q. There is some testimony that Colonel Wood, of the Rough Riders, took possession of a boat for fear of not getting off?

A. I think that so far as taking possession of a boat was concerned no officer there would have been permitted to do so. Colonel Wood and Colonel Roosevelt were there and they were desperately afraid they would not go. I have known Wood ever since he was contract surgeon, and he said, "General, for heaven's sake don't leave us," and Roosevelt felt so desperately about it that I took four more companies.

Q. You would not have allowed such an act of insubordination as taking any of the boats?

A. No, sir; had they gotten onto the wrong ship, they would have gotten off very shortly.

By Governor WOODBURY:

Q. There has been criticism about the way the transports have been fitted up, etc.

A. I would say in regard to that that they were ships used to carry merchandise and in no wise to be used to carry comfortably soldiers any distance, but they were all we had, and there was no time to build others.

By Dr. CONNER:

Q. How was it with those taken to bring the sick and wounded north?

A. I believe a greater number were put on board than was necessary, but it was because men begged to come off and come home; and you know, sir, as well as I do, that under such circumstances people give way, and I believe they did give way. The ships were not supplied with delicacies. The Government does not supply delicacies, but money; and although we had plenty of money, you could not buy a dozen eggs or milk, and the first day we landed at Santiago I found a man who had a lot of condensed milk, and I bought about \$6,000 worth of it. They had but

the bare rations. They did have some considerable quantities of stores for sale to officers because they have to buy their food.

Q. So far as your knowledge is concerned, was much service rendered you by the Red Cross and other charitable associations?

A. The Red Cross Association rendered very good service—not very much—and every ounce of their stores from Siboney to the front was drawn in Government wagons I furnished to Miss Barton.

Q. How was it after Santiago; were the supplies brought in freely?

A. Yes, sir; very freely. They were brought in in great quantities. There was no trouble about them then. Three shiploads of ice were sent down. One lady sent me a schooner load, another came from California, and Mrs. John Mackay sent another. Fresh beef was sent down—all we wanted—and there was beef in cans, but of that I did not think much. It was the best we could do.

By General McCook:

Q. They say if you use pepper and salt with it, it is palatable.

A. That was not very good, and the men did not like it; but the refrigerated beef was excellent on the first vessel; and on the second vessel, instead of keeping the temperature down to 39, they let it go to 57, and the beef spoiled.

By Governor Woodbury:

Q. If the Red Cross and kindred societies could furnish delicacies for the sick in the way they did, what is to prevent the Government from doing the same?

A. Nothing but law and the lack of preparation. If they don't authorize them they can not get them. The doctors are given money to buy them, and they are authorized to buy them, but money is no good when there is nothing to buy.

By Dr. Conner:

Q. Was the defect of those transports consequent upon the inability to get things to supply them, or the haste in sending them out, or to the negligence of those having charge of the work?

A. Haste in sending them out and inability to get anything except the ordinary parts of the ration as are authorized for the use of troops. There was nothing else there. There were some stores for sale to officers that might be put on board. The water on some of the ships was not good—it smelt badly, but was very good otherwise.

Q. And is that the same smell that is met with in water that has been kept in tanks?

A. Yes, sir; those men sent on board the transports for the north were supposed to be convalescents; but once a man gets sick down there you don't know when he is well. One day 600 were returned to duty, and the same date 842 went on the sick list. I suppose 90 per cent of the whole army was sick and 80 per cent were taking medicine. Medicine for 20,000 men was sent down and unloaded on the 20th of July, and all but a few quinine pills and some castor oil was gone on the 23d, and when the doctor came to me about it, I said take anything in Santiago and pay their price for it. I asked what percentage of sick men in the army that estimate of the supply of medicine was based on, and they said 6 per cent, and I said make it on 80 per cent sick, and they did so; and it lasted twelve days.

Q. When you had occasion to go north, did you find that those who came with you who had been sick had been made worse by the trip?

A. No, sir. I think they were all made better and stronger. I had but one company and the officers around the headquarters, and they were all better. Although there were two or three who had not been sick there—and I was one and Captain Plummer was another—we took sick two or three days after we landed.

By General Beaver:

Q. General, I think we all understand the causes which induced you to acquiesce in the sending of the troops north.

A. I think it directs me in my orders to settle that campaign as soon as possible and then return to the northern side and make a landing there as soon as possible. I believe it was thought at that time we might go to Porto Rico or attack Havana from that part of Cuba.

Q. The health of your command forbade any such move as that, and you regarded it as—

A. I took the advice of my surgeons. I told them to tell me what they thought. I think there were five of them. One of them said to me, "General, perhaps you would like to have us put it down in writing," and one of them went out and did so; and their opinion was that there was no place in that part of Cuba sufficiently high to cause the disappearance of yellow fever; and I believe that had we moved the men into the interior the deaths would have been ten times as great.

Q. Then you agreed to sending them to Montauk?

A. Yes, sir; I did; I thought it was the salvation of that command.

Q. And with the fact that yellow fever was then in your command—

A. There were then about 1,000 cases.

Q. It was desirous to put them at a place where the balance of the command would not be affected?

A. Yes, sir.

Q. And therefore you thought Montauk Point was a good place?

A. I thought it was the best camp I ever saw.

By General DODGE:

Q. In the operations in this campaign, have you any complaints to make as to the way you have been supported in it or your requests complied with by your superior officers?

A. No, sir; I have not. My orders have been given to me, and I had no interference in any way or shape or fashion, unless it was when the President declined to listen to the proposal I made about Toral and his men leaving with their guns. But those terms were not regarded as satisfactory, and the surrender was demanded; and that was the only time I was overruled, and, I think, wisely. From the day that Fifth Army Corps was organized until its disbandment there was never an unkind word between the general officers; not an officer was brought to trial, and so far as I know not a soldier was tried.

By Colonel DENBY:

Q. Isn't that a remarkable record?

A. I think it is, from my experience; and I think you gentlemen will realize it.

By General DODGE:

Q. General, we have questioned you about matters we thought of. Have you any statement you wish to make or any other information you can give us in relation to the scope of our investigation?

A. I do not know that I have, sir, I am sure. So far as I am concerned I have no complaint to make. I am only too happy to have the results we have had. It seems to me it is a poor time to be kicking just now.

Q. From your experience have you any suggestions that will be of service in the future?

A. I think, sir, the rations—as we are going to keep Porto Rico and the Philippines, I should think there should be a change in the rations. Not to a great extent. In issuing rations to the Spanish prisoners, which I did to eight or twelve thousand, I gave them beef, thinking I would give them a treat, but they preferred bacon; our men preferred the beef. I think there should be a change in the clothing—woolen cloth, but light material. I think light woolen clothing is infinitely preferable to the cotton. The Spanish wore a cotton drilling which was light and airy; but they never go to the field; they stood in the towns all the time.

Q. Then you think the present clothing is best, only made a little lighter?

A. Yes, sir; I think it is better for a hot climate.

Q. What is your suggestion as to the ration?

A. I have not given it much thought, but I think a considerable addition of dried fruits or canned fruits. It was a great addition to the men's rations when they gave canned vegetables and the pound of potatoes, and I think dried peaches and dried apricots and dried apples and perhaps raisins—raisins are about the best thing a man can march on—would be an admirable thing. And perhaps reduce the meat ration for the hot climates.

By Colonel DENBY:

Q. You say you have no complaints to make. In that do you include the Cubans?

A. Well, I would not make any complaint about them. They were very inefficient troops, not taught to fight as European and American troops do, but with their light they did very well. They kept such good watch over the communications that when I sent Colonel Miley with two troops of cavalry, after the capture of Santiago, up to San Luis to receive the surrender of those troops there, they had not heard of the fall of Santiago and refused to surrender until they sent their own officers down to verify the statement. But as to using them, I told Garcia—he seemed very grateful to see we had come down to help them, and they evidently knew that the end was in sight when the United States came down—he was very grateful, and there were tears in his eyes when he stated his troops were at my disposal. I said, "I have no authority to give you any orders; but if you choose to help me, while you are assisting I will give you rations and ammunition: beyond that I can do nothing." I never gave him an order.

General DODGE. Any further questions, gentlemen?

No response; the examination of this witness was concluded.

EXPEDITION TO SANTIAGO DE CUBA, UNDER THE COMMAND OF MAJ. GEN. WILLIAM R. SHAFTER, UNITED STATES VOLUNTEERS.

United States transports, commander, tonnage, draft, water, and coal capacity.

Con- secu- tive No.	Name.	Des- ignat- ing No.	Commander.	Ton- nage.	Draft.	Capacity.		
						Water.	Coal.	
					Feet.	Gallons.	Tons.	
1	Alamo	6	Hix	2,237	17	20,000	776	
2	Allegheny	17	Nickerson	1,493	17	16,700	450	
3	Aransas	27	Hopner	679	9	8,000	150	
4	Berkshire	9	Dizer	1,433	17	16,000	418	
5	Breakwater	29	Rivero	794	14	5,000	150	
6	Cherokee	4	Garvin	1,956	12	18,000	770	
7	Comal	7	Evans	2,251	16	32,000	630	
8	Concho	14	Risk	2,674	17	33,000	1,300	
9	Clinton	32	Wortsch	717	10	18,200	260	
10	City of Washington	16	Stevens	1,743	22	18,000	1,150	
11	Cumberland	31	Minot	88	8	4,000	110	
12	D. H. Miller	19	Peters	1,643	17	12,000	460	
13	Florida a	15	Minor	1,307	17	15,000	276	
14	Gussie	3	Burney	576	10	15,000	190	
15	Iroquois	25	Kemble	2,275	15	27,000	1,000	
16	Kanawha b	34	Evans	431	14	85,000		
17	Knickerbocker	13	Betts	1,139	16	7,000	400	
18	Laura c	33	Spalding	158	5	500	100	
19	Leona	21	Wildner	2,330	13	40,000	1,000	
20	Manteo	36	Brown	408	8	5,000	200	
21	Mattewan d	26	Lewis	2,499	17	183,000	1,200	
22	Miami e	1	McDonald	2,292	18	137,000	1,100	
23	Morgan	30	Staples	537	10	18,200	260	

a Left at Port Tampa for repairs; cut amidships to water's edge by the Miami, June 9. Vessel fitted with distiller; capacity, 2,000 gallons daily.

b Water tender.

c Tender and lighter.

d Fitted with 2 distillers; capacity, 11,000 gallons daily.

e Fitted with 2 distillers; capacity, 10,000 gallons daily.

United States transports, commander, tonnage, draft, water. etc.—Continued.

Con- secu- tive No.	Name.	Des- ignat- ing No.	Commander.	Ton- nage.	Draft.	Capacity.	
						Water.	Coal.
					<i>Feet.</i>	<i>Gallons.</i>	<i>Tons.</i>
24	Olivette <i>a</i>	11	Stevenson	1,104	12	60,000	275
25	Orizaba	24	Downs	2,334	18	45,000	800
26	Rio Grande	22	C. Staples	2,048	16	55,000	900
27	San Marcos	18	Itzen	2,187	17	38,000	815
28	Santiago	2	Leighton	1,694	18	28,000	840
29	Saratoga	20	Johnson	1,940	18	16,000	684
30	Segurança	12	Hanson	2,806	19	15,380	1,200
31	Seneca	5	Decker	1,911	19	16,750	1,200
32	Stevens <i>b</i>	35	Vanaman	227	9	115,000	Sail.
33	Stillwater	28	Galt	510	15	5,000	150
34	Vigilancia	23	McIntosh	2,900	18	24,000	1,100
35	Whitney	10	G. Staples	767	10	18,200	260
36	Yucatan	8	Robertson	2,338	18	30,000	920

a Fitted with distiller; capacity, 2,000 gallons daily.*b* Water tender.

NOTE.—Two large, decked-over lighters left Port Tampa in tow of the City of Washington and the Concho. That towed by the Concho was lost on the night of June 16.

Number of days' coal aboard the transports if steaming 9 knots an hour.

Name.	Days, steaming at 9 knots an hour.	Name.	Days, steaming at 9 knots an hour.
Alamo	20	Miami	30
Allegheny	15	Morgan	10
Aransas	12	Olivette	8
Berkshire	15	Orizaba	25
Breakwater	10	Rio Grande	30
Cherokee	25	San Marcos	25
Comal	10	Santiago	20
Concho	25	Saratoga	14
Clinton	10	Segurança	25
City of Washington	20	Seneca	20
D. H. Miller	15	Stillwater	10
Florida	18	Vigilancia	25
Gussie	10	Whitney	10
Iroquois	25	Yucatan	25
Knickerbocker	15	Cumberland	10
Leona	25	Laura	30
Manteo	10	Kanawha	10
Matteawan	30	Stevens <i>a</i> .....	.....

a Sailing vessel.

NOTE.—Large amount of coal stored in holds of Alamo, Allegheny, Berkshire, Cherokee, Concho, City of Washington, D. H. Miller, Iroquois, Leona, Matteawan, Miami, Olivette, Orizaba, Rio Grande, San Marcos, Santiago, Segurança, Seneca, Vigilancia, and Yucatan.

United States transports and boats carried by each; number of men boats may carry.

Name.	Number of boats.	Men, carrying capacity.	Name.	Number of boats.	Men, carrying capacity.
Alamo	4	80	Morgan	5	75
Allegheny	3	75	Olivette	8	160
Aransas	5	90	Orizaba	6	120
Berkshire	3	75	Rio Grande	5	90
Breakwater	5	75	San Marcos	5	132
Cherokee	6	120	Santiago	4	80
Comal	4	80	Saratoga	5	90
Concho	5	100	Segurança	6	108
Clinton	4	60	Seneca	7	140
City of Washington	4	80	Stillwater	4	50
D. H. Miller	5	100	Vigilancia	6	120
Florida	4	90	Whitney	5	90
Gussie	3	60	Yucatan	6	150
Iroquois	8	160			
Knickerbocker	3	60	Total	153	3,034
Leona	5	84	Steam lighter Laura .....	.....	400
Manteo	2	35			
Matteawan	4	125	Grand total .....	.....	3,434
Miami	4	80			

NOTE.—Steam lighter Laura may carry 400 men, standing, on her deck.

3214 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

Troops embarked on the following-named transports.

Steamer.	Designating number.	Troops on board.	Officers.	En-listed men.
Alamo	6	Headquarters, band, and Companies C, D, E, and G, 10th U. S. Infantry; Companies C and E, Engineers Battalion, and headquarters 2d Infantry Brigade, 2d Division.	33	574
Allegheny	17	Headquarters Cavalry Division. Enlisted men caring for horses.	14	80
Aransas	27	Loaded with the transportation, etc., of the 3d U. S. Infantry.	2	13
Berkshire	9	Light Artillery Battalion and Light Batteries A and F, 2d U. S. Artillery.	14	263
Breakwater	29	3d U. S. Infantry	20	467
Cherokee	4	12th U. S. Infantry and headquarters, and 3 companies of 17th U. S. Infantry.	35	852
Comal	7	Company I, 7th U. S. Infantry, and Light Batteries E and K, 1st U. S. Artillery.	10	284
Concho	14	Headquarters 2d Infantry Brigade, 2d Division; 4th U. S. Infantry and 25th U. S. Infantry.	53	1,034
Clinton	32	Companies D and B, 2d U. S. Infantry	2	169
City of Washington	16	24th U. S. Infantry and one battalion 21st U. S. Infantry.	33	751
D. H. Miller	19	Companies E, G, and H, 7th U. S. Infantry	8	280
Iroquois	25	Headquarters and Companies A, B, C, D, and F, 7th U. S. Infantry; Companies C, G, H, and K, 17th U. S. Infantry. Headquarters 2d Division and headquarters 3d Infantry Brigade, 2d Division.	38	722
Knickerbocker	13	Headquarters and 8 companies of 2d Massachusetts Infantry.	32	588
Leona	21	Eight troops 1st U. S. Cavalry, 8 troops 10th U. S. Cavalry, and headquarters 2d Cavalry Brigade, Cavalry Division.	51	910
Manteo	36	Two companies 17th Infantry and two companies 2d Massachusetts Infantry.	10	265
Matteawan	26	20th U. S. Infantry; Troops F and D, 2d U. S. Cavalry, and headquarters Independent Infantry Brigade.	32	734
Miami	1	6th U. S. Infantry and 8 troops 9th U. S. Cavalry.	55	919
Morgan	30	Major Rafferty and Troop C, 2d U. S. Cavalry	3	69
Olivette	11	Hospital ship	3	35
Orizaba	24	22d U. S. Infantry and Batteries G and H, 4th Artillery (Siege Artillery Battalion).	35	622
Rio Grande	22	8 troops of 3d U. S. Cavalry and 8 troops 6th U. S. Cavalry. Balloon Signal Detachment and headquarters 1st Cavalry Brigade, Cavalry Division.	49	882
San Marcos	18	Companies A, E, F, and H, 2d U. S. Infantry, 16th U. S. Infantry, and headquarters 1st Infantry Brigade, 1st Division.	38	1,237
Santiago	2	9th U. S. Infantry, 1 battalion 10th U. S. Infantry, and headquarters 1st Infantry Division.	51	739
Saratoga	20	13th U. S. Infantry, headquarters, band, and Companies C, D, E, and H, 21st Infantry, and headquarters 3d Infantry Brigade, 1st Division.	38	635
Segurança	12	1st U. S. Infantry, Balloon Signal Detachment, headquarters 5th Army Corps.	17	477
Seneca	5	Staff	16	---
		Officers accompanying the expedition	5	---
		8th U. S. Infantry, 2 companies 2d Massachusetts Infantry, and headquarters 1st Infantry Brigade, 2d Division.	32	656
Stillwater	28	Troop A, 2d U. S. Cavalry	3	89
Vigilancia	23	71st New York Infantry	44	954
Yucatan	8	Headquarters, band, and Companies C, D, G, and B, 2d U. S. Infantry, and 8 troops 1st Volunteer Cavalry (Rough Riders).	43	773
Total			819	15,058
Cumberland	31	Stevedores		
Gussie	3	Teamsters and packers		
Kanawha	34	Water tender		
Laura	33	Steam tender		
Stevens	35	Water tender		
Whitney	10	Teamsters		

NOTE.—First, Third, Sixth, Ninth, and Tenth U. S. Cavalry dismounted. First Volunteer Cavalry dismounted. Troops A, C, F, and D, Second U. S. Cavalry, mounted.

United States troops and transports on which they are embarked.

Organization.	Commanding officer.	On what ship.
1st Infantry	Lieut. Col. W. H. Bisbee	Segurança (12), regiment.
2d Infantry	Lieut. Col. W. M. Wherry	Yucatan (8), hdqrs., band, Companies C, D, G, and B; Clinton (32), Companies D and B; San Marcos (18), Companies A, E, F, and H.
3d Infantry	Col. John H. Page	Breakwater (29), regiment.
4th Infantry	Lieut. Col. A. H. Bainbridge	Concho (14), regiment.
6th Infantry	Lieut. Col. H. C. Egbert	Miami (1), regiment.
7th Infantry	Col. D. W. Benham	Iroquois (25), hdqrs., Companies A, B, C, D, and F; D. H. Miller (19), E, G, and H; Cemal (7), I.
8th Infantry	Maj. C. E. Conrad	Seneca (5), regiment.
10th Infantry	Lieut. Col. E. R. Kellogg	Alamo (6), hdqrs., band, Companies C, D, G, and E; Santiago (2), 1 battalion.
12th Infantry	Lieut. Col. R. Comba	Cherokee (4), regiment.
13th Infantry	Maj. P. H. Ellis	Saratoga (20), regiment.
16th Infantry	Col. H. A. Theaker	San Marcos (18), regiment.
17th Infantry	Lieut. Col. J. T. Haskell	Cherokee (4), hdqrs. and 3 companies; Iroquois (25), Companies C, G, H, and K; Manteo (26), 2 companies.
20th Infantry	Maj. Wm. S. McCaskey	Matteawan (26), regiment.
21st Infantry	Lieut. Col. J. H. Patterson	Orizaba (24), regiment.
24th Infantry	Lieut. Col. E. H. Liscum	City of Washington (16), regiment.
25th Infantry	Lieut. Col. A. S. Daggett	Concho (14), regiment.
2d Massachusetts Volunteers.	Col. E. P. Clark	Knickerbocker (13), regiment; Seneca (5), 2 companies; Manteo (36), 2 companies.
71st New York Volunteers.	Lieut. Col. W. A. Downs	Vigilancia (23), regiment.
1st Cavalry	Lieut. Col. C. D. Viele	Leona (21), regiment.
2d Cavalry	Maj. W. A. Rafferty	Morgan (30), Major Rafferty and Troop C; Matteawan (26), Troops F and D; Stillwater (28), Troop A.
3d Cavalry	Maj. H. W. Wessels	Rio Grande (22), regiment.
6th Cavalry	Lieut. Col. Henry Carroll	Do.
9th Cavalry	Lieut. Col. J. M. Hamilton	Miami (1), regiment.
10th Cavalry	Lieut. Col. S. T. Norvell	Leona (21), regiment.
1st Volunteer Cavalry	Col. Leonard Wood	Yucatan (8), regiment.
Engineer Battalion ..	Capt. E. Burr	Alamo (6), Company C, Capt. G. D. Fitch, commanding; Company E, First Lieut. E. E. Winslow, commanding.
Light Artillery Battalion.	Maj. J. W. Dillenback	Berkshire (9).
	Capt. Allyn Capron	Comal (7), Light Battery K, 1st Artillery.
	Capt. G. S. Grimes	Comal (7), Light Battery E, 1st Artillery.
	Capt. C. D. Parkhurst	Berkshire (9), Light Battery K, 1st Artillery.
Siege Artillery Battalion.	Capt. W. Ennis	Berkshire (9), Light Battery F, 2d Artillery.
Balloon Signal Detachment.	Capt. A. S. Cummins	Orizaba (24), Battery G, 4th Artillery.
5th Army Corps	Maj. J. E. Maxfield	Orizaba (24), Battery H, 4th Artillery.
	Maj. F. Greene	Rio Grande (22).
	Maj. Gen. William R. Shafter and staff.	Segurança (12).
1st Division	Brig. Gen. J. D. Kent and staff.	Do.
1st Brigade	Brig. Gen. H. S. Hawkins and staff.	Santiago (2).
2d Brigade	Col. E. P. Pearson, 10th Infantry, and staff.	San Marcos (18).
3d Brigade	Lieut. Col. W. S. Worth, 13th Infantry, and staff.	Alamo (6).
2d Division	Brig. Gen. H. W. Lawton and staff.	Saratoga (20).
1st Brigade	Col. J. J. Van Horn, 8th Infantry, and staff.	Iroquois (25).
2d Brigade	Col. Evan Miles, 1st Infantry, and staff.	Seneca (5).
3d Brigade	Brig. Gen. A. R. Chaffee and staff.	Concho (14).
Cavalry division	Maj. Gen. Joseph Wheeler and staff.	Iroquois (23).
1st Brigade	Brig. Gen. S. S. Sumner and staff.	Iroquois (23).
2d Brigade	Brig. Gen. S. B. M. Young and staff.	Rio Grande (22).
Independent Brigade	Brig. Gen. J. C. Bates and staff.	Leona (21).
		Matteawan (26).

NOTE.—Thirty civilian clerks aboard Segurança, Olivette, Allegheny, Matteawan, and Alamo; 15 military attachés, 11 quartered on the Segurança and 4 on the Olivette; 55 civilians connected with daily papers and magazines, quartered on the Vigilancia and Olivette; 1 naval cadet and at least 1 man of the Signal Corps on each transport; 272 teamsters and packers aboard the Clinton, D. H. Miller, Gussie, Whitney, Matteawan, Stillwater, Morgan, and Aransas; 5 boss stevedores and 102 stevedores aboard the Cumberland; 54 civilian hostlers and attendants aboard the Alamo, Allegheny, Comal, Clinton, D. H. Miller, Olivette, and Segurança; First, Third, Sixth Ninth, and Tenth United States Regiments of Cavalry and First Volunteer Cavalry (Rough Riders), dismounted; Troops A, C, D, and F, Second United States Cavalry, mounted.

3216 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

United States transports, forage for animals and number embarked, and to what organizations they belong if not private property.

Name.	Forage, etc.	Mules.	Government horses.	Private horses.
Alamo	Forage for 4 horses for 10 days .....	.....	.....	4
Allegheny	Forage for 190 horses for 10 days .....	.....	.....	151
Aransas	Forage loaded in New Orleans, more than 10 days' supply.	114	.....	8
Berkshire	Horses, Battery A and F, 2d Artillery; forage for 175 horses for 10 days. ....	.....	153	.....
Comal	2d Cavalry Brigade	12	.....	24
.....	2d Brigade .....	.....	.....	12
.....	Battery E, 1st Artillery .....	.....	75	.....
.....	Battery K, 1st Artillery .....	.....	75	.....
.....	8th Infantry .....	.....	.....	12
.....	Hospital Corps .....	.....	3	.....
Clinton	Forage for 230 horses for 10 days. ....	.....	.....	.....
.....	Pack train No. 16	65	1	17
.....	Draft mules, forage loaded in New Orleans; more than 10 days' supply.	54	4	.....
D. H. Miller	Draft mules, forage for 325 mules for 10 days	241	.....	2
Gussie	Pack train No. 1	66	1	.....
.....	Pack train No. 8	64	1	.....
.....	Pack train No. 13	64	1	.....
.....	Pack train No. 9	64	1	.....
.....	Pack train No. 3	67	2	.....
.....	Forage for 325 mules for 10 days. ....	.....	.....	.....
Matteawan	Troops F and D, 2d U. S. Cavalry; forage loaded in New Orleans; more than 10 days' supply.	166	106	48
Morgan	Troop C, 2d U. S. Cavalry; forage loaded in New Orleans; more than 10 days' supply; 60 sacks oats added at Port Tampa.	61	74	.....
Olivette	Headquarters, forage for 13 horses for 10 days. ....	.....	.....	13
Orizaba .....	.....	.....	.....	64
Segurança	Headquarters, forage for 30 horses for 10 days. ....	.....	.....	26
Stillwater	Troop A, 2d U. S. Cavalry, forage, loaded in New Orleans, more than 10 days' supply.	4	76	.....
Whitney .....	.....	294	5	.....
Total .....	.....	1,336	578	381
.....	.....	.....	.....	578
.....	.....	.....	.....	1,336
Grand total (animals). .....	.....	.....	.....	2,295

NOTE.—All cavalry dismounted except Troops A, C, D, and F, Second United States Cavalry.

United States transports and animals embarked on them.

Name.	Pack mules.	Bell mares.	Draft mules.	Government horses.	Private horses.
Alamo	4
Allegheny	151
Aransas	114	.....	8
Berkshire	153	.....
Comal	12	153	48
Clinton	65	1	54	4	17
D. H. Miller	241	.....	2
Gussie	325	6	.....	.....	.....
Matteawan	166	106	48
Morgan	61	74	.....
Olivette	13
Orizaba	64
Segurança	26
Stillwater	4	76	.....
Whitney	294	5	.....
Total	390	7	946	571	381

NOTE.—Pack and saddle mules fully equipped; 114 complete sets six-mule harness, 114 army wagons, 84 complete sets of four-mule-ambulance harness, 81 escort wagons, 7 Red Cross ambulances.

United States transports with quartermaster, commissary, ordnance, and engineer supplies and property embarked on them.

[List does not include means of transportation, medical supplies in charge of regimental surgeons, clothing, camp and garrison equipage, arms, ammunition, and subsistence stores issued to troops or forage issued to animals embarked.]

STEAM TRANSPORT ALAMO, NO. 6.

Engineers' supplies: 1 carload rollers.

Field equipment: 10 boxes ponchos (1,200 blankets); 38 boxes ponchos (3,800 blankets); 60 canvas tarpaulins, full size.

Ordnance: 214,000 rounds cartridges, caliber .45; 1,080 Springfield rifles; 1,530 McKeever cartridge boxes; 2,675 waist belts; 2,647 waist-belt plates.

NOTE.—Balance of cargo of this ship was loaded in New York, and consists of pontoons, bridge material, tools, sand bags, and other stores and supplies pertaining to engineer operations. It is in the custody of the engineer battalion embarked on board the vessel.

STEAM TRANSPORT ALLEGHENY, NO. 17.

Forward hold:

Commissary—

503 cases roast beef	pounds..	37,725
216 cases tomatoes	do....	16,200
111 cases baking powder	do....	2,442
152 cases bacon	do....	35,895
7 cases pepper	do....	1,353

Forage—

48 bales hay	do....	5,280
121 bales hay	do....	13,310
91 sacks oats	do....	11,375
38 sacks oats	do....	4,750

After hold:

Commissary: 961 cases beef	do....	64,975
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Forage—

91 sacks oats	do....	11,375
121 bales hay	do....	13,310

Ordnance—

Cartridges, caliber .45	rounds..	342,000
Springfield rifles .....	.....	700
McKeever cartridge boxes .....	.....	1,559
Waist belts .....	.....	2,300
Waist-belt plates .....	.....	2,850

STEAM TRANSPORT BERKSHIRE, NO. 9.

Forward hold:

Commissary—

2,087 cases hard bread	pounds..	104,350
120 sacks salt	do....	23,300
227 cases coffee	do....	19,855
5 cases pepper	do....	964
2,061 cases roast beef	do....	103,050
138 sacks flour	do....	13,800
164 sacks sugar	do....	16,400
231 cases candles	do....	9,240
150 sacks beans	do....	15,000
263 cases bacon	do....	57,053
100 sacks rice	do....	10,000
148 cases baking powder	do....	3,256
2,503 cases tomatoes	do....	187,725

Forage—

84 sacks oats	do....	10,500
31 bales hay	do....	3,875

After hold:

Commissary—

40 barrels vinegar	do....	13,625
511 cases beef	do....	25,550

3218 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

After hold—Continued.

Commissary—Continued.

612 sacks flour	pounds..	61,200
136 sacks sugar	do.....	13,600
2,071 cases hard bread	do.....	79,500
1,742 cases tomatoes	do.....	130,650

Forage—

120 sacks oats	do.....	15,000
61 bales hay	do.....	6,636

Ordnance—

Cartridges, caliber .45	rounds..	98,000
Springfield rifles		220
McKeever cartridge boxes		660
Waist belts		1,140

STEAM TRANSPORT CHEROKEE, NO. 4.

Ordnance:

Cartridges, caliber .45	rounds..	1,068,000
Cartridges, caliber .30	do.....	565,000
Cartridges, caliber .38 (revolver)	do.....	118,000

STEAM TRANSPORT COMAL, NO. 7.

Forward hold:

Commissary—

135 cases baking powder	pounds..	2,970
92 cases coffee	do.....	11,500
6 cases pepper	do.....	600
3,383 cases bread	do.....	169,150
93 cases candles	do.....	3,720
125 sacks rice	do.....	12,500
935 sacks flour	do.....	93,500
274 boxes soap	do.....	18,632
42 cases bacon	do.....	9,483
2,876 cases tomatoes	do.....	215,700

Forage—

240 sacks oats	do.....	30,000
319 bales hay	do.....	40,490
48 sacks corn	do.....	5,280

Ordnance: Ammunition for dynamite gun	packages..	34
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Amidship:

Commissary—

35 boxes soap	pounds..	2,275
186 sacks beans	do.....	18,600
10 boxes candles	do.....	450
250 boxes tomatoes	do.....	12,500
336 sacks sugar	do.....	33,600

After hold:

Commissary—

762 cases bread	do.....	38,100
50 sacks salt	do.....	10,000
588 cases bacon	do.....	139,600
51 cases baking powder	do.....	1,122
20 barrels vinegar	do.....	25,000
266 cases bacon	do.....	60,053
150 sacks beans	do.....	15,000

Ordnance—

Cartridges, caliber .45	rounds..	112,000
Springfield rifles		40
McKeever cartridge boxes		1,808
Waist-belt plates		1,168
Hotchkiss revolving cannon, complete		1
Ammunition for Hotchkiss revolving cannon	rounds..	600
Ammunition, caliber .43	do.....	287,000
Cartridges, caliber .45 (carbine)	do.....	38,500
Springfield carbines		250
Gun slings		267
Carbine slings	box..	1

STEAM TRANSPORT CONCHO, NO. 14.

Forward hold:

Commissary—

1,490 cases bread	pounds	37,250
13 chests (Colonel Weston)	do	2,761

After hold:

Commissary—

866 cases beef	do	43,300
861 cases tomatoes	do	73,375
115 cases bacon	do	26,450
4,122 cases bread	do	113,925
300 cases coffee	do	30,000
35 barrels vinegar	do	16,295
400 sacks flour	do	40,000
101 crates onions	do	5,050

STEAM TRANSPORT CLINTON, NO. 32.

Forage

Oats	pounds	132,000
Hay	do	52,765

STEAM TRANSPORT CUMBERLAND, NO. 31.

Commissary:

1 case coffee	pounds	100
1 barrel vinegar	do	200
7 sacks potatoes	do	630
9 barrels potatoes	do	1,710
63 cases hard bread	do	2,205
5 boxes bacon	do	1,189
Quartermaster: 18½ cases tents (6 to a case, 111)	do	12,765

STEAM TRANSPORT D. H. MILLER, NO. 19.

Forward hold:

Forage—

234 sacks oats	pounds	29,250
392 bales hay	do	43,120

After hold:

Ordnance—

Springfield rifles		3,000
McKeever boxes (cartridges)		1,313
Waist belts		1,178
Waist-belt plates		1,160
Gun slings		1,463

STEAM TRANSPORT IROQUOIS, NO. 25.

Forward hold:

Commissary (officers' stores)—

50 cases coffee	pounds	8,084
200 cases jelly	do	5,000
100 sacks sugar	do	10,000
94 cases pease	do	3,760
20 cases rolled oats	do	1,880
370 cases tobacco	do	13,100
55 barrels ginger ale	do	8,250
100 cases bacon	do	3,200
10 cases matches	do	250
1 case toothbrushes, etc	do	119
50 cases deviled ham	do	7,590
12 barrels ham	do	3,106
1 case pipes	do	50
140 cases soup (turtle)	do	7,000
40 cases prunes	do	1,000
50 cases milk	do	2,500
25 cases mustard	do	1,250
2 bales towels	do	817
34 cases lard	do	2,040

3220 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

Forward hold—Continued.

Commissary (officers' stores)—Continued.

8 cases tea	pounds..	320
22 cases toilet paper	do.....	2,332
13 cases soap	do.....	650
75 cases peaches	do.....	3,750
17 cases biscuits	do.....	850
394 cases lime juice	do.....	19,500

STEAM TRANSPORT KNICKERBOCKER, NO. 13.

Forward hold:

Commissary—

126 cases bread	pounds..	6,300
208 cases beans	do.....	10,400
590 cases tomatoes	do.....	14,250
147 crates tobacco	do.....	20,580
79 crates tobacco (smoking)	do.....	2,255
377 barrels potatoes	do.....	65,975
153 cases of bread	do.....	7,650
155 cases bread	do.....	7,750

After hold:

Commissary—

100 cases tomatoes	do.....	10,000
162 cases coffee	do.....	8,100
62 cases beans	do.....	3,100
150 sacks sugar	do.....	15,000

Ordnance from Tampa for Lieutenant Brooke, A. O. O. cases.. 32

STEAM TRANSPORT LEONA, NO. 21.

Forward hold:

Commissary—

154 sacks coffee	pounds..	27,200
75 barrels potatoes	do.....	13,500
25 barrels vinegar	do.....	9,360
38 cases candles	do.....	1,520
1,000 cases bread	do.....	50,000
15 barrels salt	do.....	4,500
223 cases baking powder	do.....	4,906
1,085 sacks flour	do.....	108,500
686 cases beef	do.....	34,300
146 sacks sugar	do.....	14,600
124 cases bacon	do.....	28,750
607 cases tomatoes	do.....	42,490
3 cases pepper	do.....	570

After hold:

Commissary—

1,978 cases tomatoes	do.....	147,350
171 barrels potatoes	do.....	30,780
2 barrels salt	do.....	560
404 sacks sugar	do.....	40,400
8 cases pepper	do.....	1,738
125 cases bacon	do.....	31,250

Forage—

8 bales hay	do.....	1,705
12 sacks oats	do.....	1,500

Ordnance—

Cartridges, caliber .45	rounds..	92,000
Cartridges, caliber .30	do.....	569,000

STEAM TRANSPORT MANTEO, NO. 36.

Forage:

Oats	pounds..	107,360
Hay	do.....	120,630

STEAM TRANSPORT MIAMI, NO. 1.

Forward hold:

Forage—

Oats	pounds..	388,000
Hay	do.....	284,730

After hold:

Forage—	
Oats	pounds 120,500
Hay	do 371,400

STEAM TRANSPORT ORIZABA, NO. 24.

Forward hold:

Forage—	
100 sacks oats	pounds 12,500
264 bales hay	do 29,475

NOTE.—This ship contains siege battery and ammunition, etc., for same.

STEAM TRANSPORT RIO GRANDE, NO. 22.

Forward hold:

Forage: Hay	pounds 108,600
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After hold:

For balloon: 46 carboys vitriol (balloon and materials, etc., for Signal Corps)	do 7,980
Ordnance: Cartridges, caliber .30	rounds 547,000

STEAM TRANSPORT SAN MARCOS, NO. 18.

Forward hold:

Commissary—	
1,277 cases bacon	pounds 282,212
401 cases coffee	do 20,050
371 cases baking powder	do 8,162
188 cases candles	do 7,520
13 cases pepper	do 2,275
2,843 cases tomatoes	do 204,210
2,686 cases hard bread	do 134,300
1,230 cases roast beef	do 61,500

Forage—

33 bales hay	do 4,125
24 sacks oats	do 3,000

After hold:

Commissary—

988 cases roast beef	do 49,400
208 cases tomatoes	do 20,176
24 sacks beans	do 2,400
200 cases coffee	do 20,000
324 sacks salt	do 28,046
15 sacks rice	do 1,500
2,294 sacks flour	do 229,400
104 barrels vinegar	do 49,444

STEAM TRANSPORT SANTIAGO, NO. 20.

Engineers' supplies: Sand bags 120,000

STEAM TRANSPORT SARATOGA, NO. 20.

Forward hold:

Commissary—

180 cases bacon	pounds 38,510
150 sacks sugar	do 15,000
185 barrels flour	do 37,000
15 barrels salt	do 4,500
41½ barrels flour	do 4,100
160 cases coffee	do 8,000
84 cases baking powder	do 1,848
603 cases tomatoes	do 45,225
445 cases beef	do 22,250
2,000 cases bread	do 50,000

After hold:

Commissary—

83 cases bread	do 4,150
15 barrels vinegar	do 7,022
445 cases beef	do 22,250

Ordnance: Rounds cartridges, caliber .30 498,000

3222 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

STEAM TRANSPORT SEGURANCA, NO. 12.

Forward hold:

Commissary—

815 sacks flour	pounds..	81,500
750 cases bacon	do.....	188,750
751 sacks sugar	do.....	19,050

Forage—

38 bales hay	do.....	4,180
29 sacks oats	do.....	3,625

After hold:

Commissary—

620 cases tomatoes	do.....	46,500
1,244 sacks flour	do.....	124,400
504 cases beef	do.....	25,200

STEAM TRANSPORT SENECA, NO. 5.

Forward hold:

Commissary—

152 cases bacon	pounds..	35,628
2,108 cases hard bread	do.....	105,400
515 cases baking powder	do.....	11,330
10 sacks salt	do.....	2,000

After hold:

Commissary—

3,303 cases hard bread	do.....	149,025
1,200 cases roast beef	do.....	52,500
360 cases soap	do.....	21,600
75 cases candles	do.....	3,375
36 cases bacon	do.....	8,100
486 cases sugar	do.....	48,600
181 barrels flour	do.....	36,200

STEAM TRANSPORT VIGILANCIA, NO. 23.

Forward hold:

Forage:

Oats	pounds..	119,875
Hay	do.....	139,785

After hold:

Forage: Oats	do.....	229,215
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STEAM TRANSPORT WHITNEY, NO. 10.

Forage:

170 sacks corn	pounds..	18,700
118 sacks oats	do.....	14,750
501 bales hay	do.....	60,610

STEAM TRANSPORT YUCATAN, NO. 8.

Forward hold:

Forage: 1,367 bales hay	pounds..	170,325
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After hold:

Forage: 560 sacks oats	do.....	71,125
Engineers' supplies: Sand bags		100,000

NOTE.—The following-named transports from Mobile, carrying General Bates's brigade, have on board sixty days' rations for officers and men: *Aransas, Breakwater, Matteawan, Morgan, Stillwater.*

2. The *Olivette* having been designated as a hospital ship, she was not loaded with forage, ammunition, etc.

3. The *City of Washington* carried no stores except ten days' supply for the troops embarked on her; this owing to her deep draft and consequent inability to reach Port Tampa.

4. All vessels not appearing in the foregoing list are accounted for elsewhere in the report.

Wagons and ambulances, complete, and transports on which they are embarked.

Name.	Class.	Number.	Total.
Aransas.....	Army wagons.....	8	
	Escort wagons.....	19	
	Ambulances.....	1	
			26
Cherokee.....	Six-mule wagons.....		104
Iroquois.....	do.....	10	
	Ambulances.....	4	
			14
Matteawan.....	Six-mule wagons.....	44	
	Ambulances.....	1	
			45
Morgan.....	Army wagons.....		8
Stillwater.....	do.....	4	
	Ambulances.....	1	
			5
	Grand total.....		202

Artillery and transports on which they are embarked.

Name.	Artillery.
Comal.....	1 light battery—guns, caissons, ammunition, etc., and 1 Hotchkiss gun.
Iroquois.....	2 light batteries—guns, caissons, ammunition, etc.
Seneca.....	1 light battery—guns, caissons, ammunition, etc.
Orizaba.....	Siege guns, siege howitzers, ammunition, and material for same.
Cherokee.....	2 Gatling guns and detachment.
Yucatan.....	1 dynamite gun and detachment of First Volunteer Cavalry.

Forage aboard United States transports for future supply.

Steamer.	Oats.	Hay.	Steamer.	Oats.	Hay.
	<i>Pounds.</i>	<i>Pounds.</i>		<i>Pounds.</i>	<i>Pounds.</i>
Allegheny.....	27,500	31,900	Orizaba.....	12,500	29,475
Aransas.....	102,000	90,000	Rio Grande.....		108,600
Berkshire.....	25,500	10,510	San Marcos.....	3,000	4,125
Comal.....	30,000	40,490	Segurança.....	3,625	4,180
Clinton.....	132,000	52,765	Stillwater.....	24,600	35,000
D. H. Miller.....	29,250	43,120	Vigilancia.....	349,090	139,785
Leona.....	1,500	1,705	Whitney.....	81,930	145,450
Manteo.....	107,360	120,630	Yucatan.....	71,125	170,352
Matteawan.....	378,000	445,000			
Miami.....	508,500	656,130	Total.....	1,961,980	2,292,690
Morgan.....	74,500	163,500			

Sixty days' forage for all animals:

Oats.....	pounds..	1,365,840
Hay.....	do.....	1,874,040

U. S. TRANSPORT SEGURANÇA,
Off Cape Maysi, Cuba, June 19, 1898.

The foregoing report respectfully submitted to the adjutant-general, Fifth Army Corps.

C. F. HUMPHREY,
Lieutenant-Colonel, Quartermaster Department,
Chief Quartermaster of the Expedition.

3224 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

Transports of the original fleet returning to Santiago before noon of August 28.

Name.	Date.	From—	Passengers and cargo.
Allegheny	Aug. 22	Port Tampa	Light.
Breakwater	Aug. 11	New York	Medical stores, camp and garrison equipage, and ice machines.
Clinton	Aug. 15	Port Tampa	Contract physicians and commissary stores.
City of Washington	Aug. 24	Porto Rico	Commissary stores.
D. H. Miller	Aug. 14	.....do	350 civilian employees.
Gussie	July 24	Port Tampa	Mules and forage.
Iroquois	July 20	.....do	Commissary stores, camp and garrison equipage.
Knickerbocker	Aug. 28	.....do	Part of 5th U. S. Infantry.
Leona	Aug. 14	Savannah	Part of Colonel Sargent's regiment of immunes.
Olivette	Aug. 2	New York	Medical stores and hospital outfit.
Rio Grande	Aug. 12	Savannah	Part of Colonel Sargent's regiment of immunes.
Santiago	Aug. 17	Port Tampa	Civilian employees, 5 doctors, quartermaster stores, and 112,950 pounds forage.
Saratoga	Aug. 25	.....do	Part of 5th U. S. Infantry, commissary stores, and lumber.
Seneca	Aug. 11	Porto Rico	Light.
Yucatan	Aug. 17	Port Tampa	Nurses and surgeons.

Transports arriving in Cuba not of the original expedition.

Name.	Date of arrival.	Where.	Cargo, where unloaded.
Louisiana	June 26	Siboney	Recruits, pack trains, 10 ambulances, and commissary stores. Recruits debarked at Siboney; cargo at Daiquiri. Ordered to New York with civilian employees, sick and discharged soldiers Aug. 1. (See list showing arrival and departure of transports.)
Rita	July 9	.....do	Not unloaded; sent to Porto Rico.
Specialist .....	.....do .....	.....do	Horses and 81 men of 4th and 5th U. S. Artillery and forage. Light artillery debarked at Daiquiri; reembarked and sent to Porto Rico.
	Aug. 2	Santiago	Light, from Porto Rico. Used in sending troops from Santiago to Guantanamo Bay for transportation north by naval vessels. Returned to Montauk Point Aug. 23. (See list showing arrival and departure of transports.)
Unionist	July 9	Siboney	Horses and 122 men of 4th and 5th U. S. Artillery, recruits, and forage. Light artillery debarked at Daiquiri; reembarked and sent to Porto Rico.
	Aug. 21	Santiago	Light, from Porto Rico. Loaded with horses and attendants and ordered to Montauk Point Aug. 26. (See list showing arrival and departure of transports.)
Comanche	July 9	Siboney	Horses, 688 men of Signal Corps, and 4th and 5th U. S. Artillery, and commissary stores. Unloaded, except commissary stores, at Daiquiri; received portable shields from Gates City and sent to Porto Rico.
	Aug. 12	Santiago	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 13. (See list showing arrival and departure of transports.)
City of Macon	July 9	Siboney	Part of Illinois Volunteer Infantry and stores. Troops unloaded at Siboney; stores sent to Porto Rico.
	Aug. 11	Santiago	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 14. (See list showing date of arrival and departure of transports.)
Gate City	July 9	Siboney	Part of 1st Illinois Volunteer Infantry, portable shields and commissary stores. Portable shields transferred to Comanche at Daiquiri; commissary stores unloaded at Santiago. Loaded with troops and ordered to Montauk Point Aug. 7. (See list showing arrival and departure of transports.)
Hudson .....	.....do .....	.....do	955 recruits and commissary stores. Unloaded at Siboney and left Santiago July 20 with sick and wounded for Fort Monroe.
	Aug. 18	Santiago	Light. Loaded with troops and ordered to Montauk Point Aug. 19. (See list showing arrival and departure of transports.)

Transports arriving in Cuba not of the original expedition—Continued.

Name.	Date of arrival.	Where.	Cargo, where unloaded.
Catania	July 10	Siboney	1st District of Columbia Volunteer Infantry and commissary stores. Troops debarked at Siboney; commissary stores unloaded at Santiago. Loaded with convalescents and one company of infantry as guards, and ordered to Montauk Point Aug. 17. (See list showing arrival and departure of transports.)
Underwriter	July 16	do	Steam tugboat, used at Siboney and Santiago for towing and lightering purposes. Left at Santiago when Colonel Humphrey was ordered north.
Nueces	July 19	Mouth of Santiago Harbor.	Siege train and material and part of army headquarters wagon and pack trains. Not unloaded in Cuba; sent to Porto Rico.
	Aug. 20	Santiago	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 26. (See list showing arrival and departure of transports.)
Lampasas	July 19	do	Company H, 1st District of Columbia Engineers; Company I, 1st Illinois Engineers; pontoons, engineers' material, and tools, in charge of Col. W. M. Black, U. S. V. Red Cross nurses, civilian employees, and part of army headquarters wagon and pack trains. Not debarked; sent to Porto Rico.
Mississippi	July 20	do	Civilian employees, mules, commissary stores and about 400,000 pounds refrigerator beef. Employees debarked; refrigerator beef unloaded daily as required for issue to troops. Ordered to Porto Rico with mules and commissary stores July 30.
Panama	July 22	do	D. Van Aken Co. contracting expedition, with dock and miscellaneous building materials, mechanics, and stevedores. Detained until July 24, waiting for steam tug and lighters, reported en route to Porto Rico from New York. Ordered to Porto Rico July 24, with directions to delay a reasonable length of time at Cape Maysi to intercept said lighters and tow them direct to Porto Rico.
Bessie	July 24	do	Steam lighter used for lightering purposes in Santiago Harbor. Left at Santiago when Colonel Humphrey was ordered north.
Port Victor	July 27	do	About 360,000 pounds refrigerator beef, mules, and 650 pounds of property for Red Cross Society, 200 tons quartermaster stores, and a "Swift refrigerator plant" to be set up on shore. Mules unloaded at once. Red Cross stores could not be unloaded until the ice schooner Chas. B. Baulch was unloaded and dried out. Quartermaster stores could not, therefore, be unloaded; nor could the refrigerator plant, the latter lying in the bottom of the ship. The refrigerator beef was unloaded daily at the rate required for issue to troops. Unloading did not commence at once because the cargo of refrigerator beef on the Mississippi had not been issued upon the arrival of the Port Victor, nor for some days after. Vessel left at Santiago when Colonel Humphrey was ordered north.
Chas. B. Baulch ..	July 30	do	Ice schooner, loaded with ice for U. S. forces in Cuba; donated by Mrs. Mackay, of New York. Left at Santiago when Colonel Humphrey was ordered north.
Berlin	Aug. 2	do	Colonel Hood's regiment of immunes. Troops debarked, and ship ordered to New Orleans, August 5, with civilian employees, sick and discharged soldiers.
	Aug. 22	do	Colonel Crane's regiment of immunes. Troops debarked. Loaded with troops and ordered to Montauk Point Aug. 25. (See list showing arrival and departure of transports.)
Fanita	Aug. 2	do	Civilian employees, camp equipage, and commissary stores. Loaded with civilian employees and ordered to Port Tampa Aug. 25.
Grande Duchesse ..	do	do	Quartermaster and commissary stores from Porto Rico. Quartermaster stores unloaded, but commissary stores remained on board when ship was loaded with troops and ordered to Montauk Point on August 10. (See list showing arrival and departure of transports.)

3226 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

Transports arriving in Cuba not of original expedition—Continued.

Name.	Date of arrival.	Where.	Cargo, where unloaded.
Michigan	Aug. 4	Santiago	About 400,000 pounds of refrigerator beef, mules, wagons, and forage. Much unavoidable delay in unloading this ship of mules, wagons, and forage, it being the intention to send these to Porto Rico. The beef was unloaded daily as required for issue to the troops, but in this case, as in the case of the beef on the Port Victor, the issues decreased daily owing to the shipment of troops north. Vessel left at Santiago when Colonel Humphrey was ordered north.
Triton	Seized Aug. 6.	do	Steam tugboat. Required for use at and in the vicinity of Santiago, and therefore seized by order of General Shafter. No formal contract entered into.
Tarpon	Aug. 6	do	Steam lighter and water boat; towed Suwanee to Santiago from Port Tampa. Used for lightering purposes in and at mouth of harbor; also for watering United States and Spanish transports. Left at Santiago when Colonel Humphrey was ordered north.
Suwanee	do	do	Snag boat; towed by Tarpon from Port Tampa to Santiago en route to Porto Rico. Left at Santiago when Colonel Humphrey was ordered north.
Mobile	Aug. 10	do	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point August 12. (See list showing arrival and departure of transports.)
Tofa	do	do	Coal schooner; used in supplying necessary coal to transports. Left at Santiago when Colonel Humphrey was ordered north.
Arkadia	Aug. 11	do	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 16. (See list showing arrival and departure of transport.)
Mohawk	Aug. 15	do	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 20. (See list showing arrival and departure of transports.)
Minnewaska	Aug. 17	do	Colonel Ray's regiment of immunes, and firewood. Troops debarked and part of cargo discharged. Loaded with troops and ordered to Montauk Point Aug. 23. (See list showing arrival and departure of transports.)
Swan	Aug. 18	do	Coal schooner; used in supplying necessary coal to transports. Left at Santiago when Colonel Humphrey was ordered north.
Bergen	Aug. 19	do	Coal schooner; used in supplying necessary coal to transports. Left at Santiago when Colonel Humphrey was ordered north.
Florida	Aug. 21	do	Light, from Porto Rico. Left at Santiago when Colonel Humphrey was ordered north.
Bay State	do	do	Massachusetts State Hospital Corps. Loaded with sick and ordered to Montauk Point Aug. 24. (See list showing arrival and departure of transports.)
Harrisburg	Aug. 23	do	Steam collier; 150 tons of coal transferred to Florida at Santiago; ordered to Ponce, Porto Rico, with the balance Aug. 26.
Roumanian	Aug. 25	do	Colonel Sargent's regiment of immunes. Troops debarked. Loaded with troops and convalescents and ordered to Montauk Point Aug. 29. (See list showing arrival and departure of transports.)

NAVAL VESSELS.

Yale	June 27	Siboney	33d Michigan Volunteer Infantry, 1 battalion; 34th Michigan Volunteer Infantry, camp and garrison equipage, ammunition, and commissary stores. Troops unloaded by ship's boats; property unloaded by steamer Manteo and steam lighter Laura. Camp equipage and ammunition discharged at Daiquiri.
Do	July 11	do	General Miles and staff, 6th Massachusetts Volunteer Infantry, and part of the 8d Illinois Volunteer Infantry; not unloaded in Cuba.

Transports arriving in Cuba not of original expedition—Continued.

NAVAL VESSELS—Continued.

Name.	Date of arrival.	Where.	Cargo, where unloaded.
Yale.....	Aug. 17	Outside of harbor	8th Illinois Volunteer Infantry and medical stores. Troops and stores were lightered to the wharves inside the harbor by steamers Orizaba and Berkshire. Troops lightered out to her when she was ordered to Montauk Point Aug. 19. (See list showing arrival and departure of transports.)
Harvard.....	July 1	Siboney.....	9th Massachusetts Volunteer Infantry, two battalions; 34th Michigan Volunteer Infantry and regimental property. Unloaded at once by means of ship's boats and lighters.
	Aug. 18	Outside of harbor	Light. Troops lightered out to her, when she was ordered to Montauk Point Aug. 21. (See list showing arrival and departure of transports.)
St. Paul.....	July 10	Siboney.....	8th Ohio Volunteer Infantry, civilian employees, clothing, and quartermaster stores, in charge of Captain Goff, assistant quartermaster volunteers. Troops and stores transferred to steamer Coma at Guantanamo Bay; taken to Santiago and debarked. After going north she returned to Guantanamo Bay, where troops were lightered to her by steamers Berkshire and Specialist on Aug. 11, when she was ordered to Montauk Point. (See list showing arrival and departure of transports.)
St. Louis.....	Aug. 8	Outside of harbor	Light. Loaded with troops lightered out to her and ordered to Montauk Point Aug. 10. (See list showing arrival and departure of transports.)
Badger.....		Guantanamo Bay	Light. Loaded with troops at Guantanamo Bay by steamers Berkshire and Specialist and ordered to Montauk Point Aug. 18. (See list showing arrival and departure of transports.)
Resolute.....	July 24	Santiago.....	Hospital supplies and nurses. Was immediately unloaded by the steamer Berkshire, which vessel went to Siboney to debark medical supplies; could land but few owing to the surf; returned to Santiago, and stores were sent down on the tug Underwriter, which was only partially unloaded because of surf. Tug returned to Santiago, and remaining stores were shipped by rail and wagon transportation. Loaded with troops at Guantanamo Bay by steamers Berkshire and Specialist and ordered to Montauk Point Aug. 8. (See list showing arrival and departure of transports.)
Prairie.....	Aug. 20	do.....	Light. Loaded with troops and ordered to Montauk Point Aug. 21. (See list showing arrival and departure of transports.)
Panther.....	Aug. 26	do.....	Light. Loaded with troops and ordered to Montauk Point Aug. 26. (See list showing arrival and departure of transports.)

Water, ice, and coal supplied to vessels requiring same.

Name.	Date of departure.	Water.	Ice.	Coal.	Remarks.
		Gallons.	Tons.	Tons.	
Allegheny.....	July 28		10		8,000 gallons water bought.
Berkshire.....	Aug. 26	10,000	20	150	
Breakwater.....	Aug. 14		10		
Comal.....	July 28	15,000			
Clinton.....	Aug. 21		5		
City of Washington.....	Aug. 28	10,000	12		Condenser with capacity of 11,000 gallons daily. Condenser with capacity of 10,000 gallons daily.
D. H. Miller.....	Aug. 19	10,000		150	
Iroquois.....	July 31	15,000			
Leona.....	Aug. 16	10,000	10	50	
Matteawan.....	Aug. 8		15		
Miami.....	do.....		15		9,000 gallons water bought.
Orizaba.....	Aug. 26	4,000	15	200	
San Marcos.....	July 28	15,000			
Santiago.....	Aug. 20		15		
Seneca.....	Aug. 13	15,000	10		
Vigilancia.....	Aug. 9	20,000	20		

Water, ice, and coal supplied to vessels requiring same—Continued.

Name.	Date of departure.	Water.	Ice.	Coal.	Remarks.
Yucatan	Aug. 20		10		
Specialist	Aug. 22	10,000	10		Small condenser.
Unionist	Aug. 26		9		Do.
Comanche	Aug. 13		25		
City of Macon	Aug. 14	10,000	15	150	
Gate City	Aug. 7	16,000	10		
Hudson	Aug. 19	6,000	10		
Catania	Aug. 17	10,000	20		Do.
Nueses	Aug. 25	15,000	30	250	Do.
Berlin	do	14,000	10		
Grande Duchesse	Aug. 10	20,000	40	250	Condenser (broken), 350 tons coal moved.
Fanita	Aug. 25	7,000	6		
Mobile	Aug. 12	20,000	25		
Alicante	Aug. 10	10,000			Spanish transport.
Isle de Luzon	Aug. 14	10,000			Do.
Arkadia	Aug. 16	5,000	15		Condenser.
P. Satrustiqui	Aug. 24	21,700			Spanish transport.
Montevideo	Aug. 25	21,700			Do.
Isle de Panai	Aug. 20	21,700			Do.
Villaverde	do	10,000			Do.
Mohawk	do	7,500	50		Condenser.
Covadanga	Aug. 19	10,000			Spanish transport.
San Augustin	do	10,000			Do.
Minnewaska	Aug. 23	15,000	40		
Bay State	Aug. 24			70	Massachusetts State hospital ship.
Mortera	Aug. 12	9,300	6		Prize vessel.
Florida	(a)		10	150	Condenser.

a Left in harbor.

NOTE.—The light-draft steamers, tugs, and steam lighters were kept fully supplied with coal and water.

Arrival of transports in Cuba, showing date of departure, how loaded, and destination.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning.	Destination.
Alamo	June 20	July 22	Civilian employees, sick and discharged soldiers.	Fort Monroe.
Allegheny	do	July 28	do	Port Tampa.
Do	Aug. 22	Aug. 24	9th Massachusetts Volunteer Infantry (500 men).	Montauk Point.
Aransas	June 20	July 20	Civilians, sick and discharged soldiers.	Port Tampa.
Berkshire	do	Aug. 26	400 convalescents	Montauk Point.
Breakwater	do	July 9	Wounded	Fort Monroe.
Do	Aug. 11	Aug. 14	2 battalions 12th U. S. Infantry (9 officers and 339 men).	Montauk Point.
Cherokee	June 20	July 5	Sick and wounded	Key West.
Comal	do	July 28	Civilian employees, sick and discharged soldiers.	Port Tampa.
Concho	do	July 22	Sick (from Siboney)	Fort Monroe.
Clinton	do	July 23	Discharged employees	Port Tampa.
Do	Aug. 15	Aug. 21	Red Cross Society	Havana.
City of Washington	June 20	July 8	Sick and wounded	Port Tampa.
Do	Aug. 24	Aug. 28	Colonel Humphrey and civilian employees.	Montauk Point.
Cumberland	June 20		Vessel left at Santiago when Colonel Humphrey was ordered north.	
D. H. Miller	do	June 30	Civilian employees, sick and discharged soldiers.	Port Tampa.
Do	Aug. 14	Aug. 19	1st U. S. Infantry (425 men).	Montauk Point.
Gussie	June 20	June 30	Civilian employees, sick and discharged soldiers.	Port Tampa.
Do	July 24	July 26	Forage and mules	Porto Rico.
Iroquois	June 20	July 2	Sick and wounded	Key West.
Do	July 20	July 31	Sick officers and civilian employees	New York.
Kanawha	June 20		Water boat; left at Santiago when Colonel Humphrey was ordered north.	
Knickerbocker	do	July 30	Civilian employees, sick and discharged soldiers.	Port Tampa.
Do	Aug. 23		Vessel left at Santiago when Colonel Humphrey was ordered north.	

Arrival of transports in Cuba, showing date of departure, how loaded, and destination—Continued.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning.	Destination.
Laura.....	June 20	-----	Steam lighter left at Santiago when Colonel Humphrey was ordered north.	
Leona.....	do	July 22	Sick (from Siboney).....	Fort Monroe.
Do.....	Aug. 14	Aug. 16	2 troops 9th U. S. Cavalry, 1 company 34th Michigan, 3 companies 12th U. S. Infantry, Ennis's Battery and Gatling-gun detachment (600 men).	Montauk Point.
Manteo.....	June 20	-----	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Matteawan.....	do	Aug. 8	3d and 6th U. S. Cavalry (430 men).	Do.
Miami.....	do	do	1st Volunteer Cavalry and General Wheeler's headquarters (700 men.)	Do.
Morgan.....	do	July 3	Civilian employees, sick and discharged soldiers.	Port Tampa.
Olivette.....	do	July 10	Sick and wounded.....	Fort Monroe.
Do.....	Aug. 2	Aug. 15	Sick.....	Do.
Orizaba.....	June 20	Aug. 23	Sick paymasters.....	Montauk Point.
Rio Grande.....	do	July 22	Sick (from Siboney).....	Fort Monroe.
Do.....	Aug. 12	Aug. 13	9th and 10th U. S. Cavalry (625 men).	Montauk Point.
San Marcos.....	June 20	July 28	Civilian employees, sick and discharged soldiers.	Port Tampa.
Santiago.....	do	July 24	Sick.....	Fort Monroe.
Do.....	Aug. 17	Aug. 20	Part of 34th Michigan (636 officers and men).	Montauk Point.
Saratoga.....	June 20	July 31	Civilian employees, sick and discharged soldiers.	Port Tampa.
Do.....	Aug. 25	-----	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Segurança.....	June 20	July 31	Civilian employees, sick and discharged soldiers.	Do.
Seneca.....	do	July 14	Sick and wounded.....	Fort Monroe.
Do.....	Aug. 11	Aug. 13	4th U. S. Infantry (420 men).....	Montauk Point.
Stevens.....	June 20	July 14	Water schooner.....	Mobile.
Stillwater.....	do	July 3	Sick and wounded.....	Port Tampa.
Vigilancia.....	do	Aug. 9	1st U. S. Cavalry (750 men).....	Montauk Point.
Whitney.....	do	June 30	Civilian employees, sick and discharged soldiers.	Port Tampa.
Yucatan.....	do	July 28	do.....	Do.
Do.....	Aug. 17	Aug. 20	7th U. S. Infantry (500 men).....	Montauk Point.
Louisiana.....	June 26	Aug. 1	Civilian employees, sick and discharged soldiers.	New York.
Rita.....	July 9	July 17	Not unloaded in Cuba.....	Porto Rico.
Specialist.....	do	July 15	Unloaded of artillery and horses; reloaded and sent to General Miles.	Do.
Do.....	Aug. 2	Aug. 23	Captains of 4 light batteries, enough enlisted men to care for horses, 291 horses, guns, ammunition, harness, etc.	Montauk Point.
Unionist.....	July 9	July 15	Unloaded of artillery and horses; reloaded and sent to General Miles.	Porto Rico.
Do.....	Aug. 21	Aug. 23	Horses and attendants.....	Montauk Point.
Comanche.....	July 9	July 15	Horses, artillerymen, and part of commissary stores unloaded; received portable shields from Gate City and sent to General Miles.	Porto Rico.
Do.....	Aug. 12	Aug. 13	25th U. S. Infantry (493 men).....	Montauk Point.
City of Macon.....	July 9	July 19	Troops unloaded at Siboney; stores sent to General Miles.	Porto Rico.
Do.....	Aug. 11	Aug. 14	17th U. S. Infantry (22 officers, 445 men).	Montauk Point.
Gate City.....	July 9	Aug. 7	Part of 3d U. S. Cavalry, 6th U. S. Cavalry, and General Sumner's headquarters (35 officers and 505 men).	Do.
Hudson.....	do	July 20	Sick and wounded.....	Fort Monroe.
Do.....	Aug. 18	Aug. 19	Part 1st District of Columbia Volunteer Infantry (500 men).	Montauk Point.
Catania.....	July 10	Aug. 17	Hospital ship, 400 sick and one company as guard.	Do.
Underwriter.....	July 16	-----	Tugboat; left at Santiago when Colonel Humphrey was ordered north.	
Neuces.....	July 19	July 19	Not unloaded in Cuba.....	Porto Rico.

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Arrival of transports in Cuba, showing date of departure, how loaded, and destination—Continued.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning.	Destination.
Neuces	Aug. 20	Aug. 26	Part of 1st Illinois Volunteer Infantry and part of 24th U. S. Infantry (491 men).	Montauk Point.
Lampasas	July 19	July 19	Not unloaded in Cuba.....	Porto Rico.
Mississippi	July 20	July 30	Beef and stevedores taken off, sent to General Miles.	Do.
Panama.....	July 22	July 24	Not unloaded in Cuba.....	Do.
Bessie.....	July 24	.....	Steam lighter; left at Santiago when Colonel Humphrey was ordered north.	
Fort Victor.....	July 27	.....	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Chas. B. Baulch.....	July 20	.....	Ice schooner; left at Santiago when Colonel Humphrey was ordered north.	
Berlin.....	Aug. 2	Aug. 5	Civilian employees, sick and discharged soldiers.	New Orleans.
Do	Aug. 22	Aug. 25	Part of Massachusetts Volunteer Infantry; part of 1st Illinois Volunteer Infantry, and General Bates's headquarters (900 men).	Montauk Point.
Grande Duchesse.....	Aug. 2	Aug. 10	16th U. S. Infantry and two battalions New York Volunteer Infantry (1,200 men).	Do.
Fanita	do	Aug. 25	Civilian employees.....	Port Tampa.
Michigan	Aug. 4	.....	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Triton	Seized Aug. 6.	.....	Tugboat; left at Santiago when Colonel Humphrey was ordered north.	
Tarpon	Aug. 6	.....	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Suwanee.....	do	.....	Snag boat; left at Santiago when Colonel Humphrey was ordered north.	
Mobile	Aug. 10	Aug. 12	8th and 22d U. S. Infantry, 2d Massachusetts Volunteer Infantry, and General Ludlow's headquarters (1,700 men).	Montauk Point.
Alacante	Aug. 8	Aug. 10	Spanish sick (38 officers, 1,000 men)	Spain.
Isle de Luzon.....	Aug. 10	Aug. 14	Spanish soldiers (1,400 officers and men).	Do.
Tofa	do	.....	Coal schooner; left at Santiago when Colonel Humphrey was ordered north.	
Arkadia	Aug. 11	Aug. 16	2 batteries light artillery, 156 horses, 2 officers, 161 men.	Montauk Point.
P. Satrustiqui	Aug. 13	Aug. 24	Spanish soldiers (2,067 men and 125 officers).	Spain.
City of Madrid	Aug. 15	.....	Spanish transport; left at Santiago when Colonel Humphrey was ordered north.	
Montevideo.....	do	Aug. 25	Spanish soldiers (139 officers, 2,400 men).	Do.
Isle de Panai.....	do	Aug. 20	Spanish soldiers (1,100 men, 76 officers).	Do.
Villiverdi	do	do	Spanish soldiers (1,064 men, 75 officers).	Do.
Mohawk	do	do	8th Ohio Volunteer Infantry (1,145 men).	Montauk Point.
Covadanga	Aug. 16	Aug. 19	Spanish soldiers (2,257 officers and men).	Spain.
San Augustin.....	do	do	Spanish soldiers (1,400 men, 97 officers).	Do.
Leon Troce.....	Aug. 17	.....	Spanish transport; left at Santiago when Colonel Humphrey was ordered north.	
Minnewaska.....	do	Aug. 23	Part 33d Michigan Volunteer Infantry, part 1st District of Columbia Volunteer Infantry, 2d U. S. Cavalry and horses, Engineer Corps, and Balloon Signal detachment (13 officers, 728 men).	Montauk Point.
Suwanee.....	Aug. 18	.....	Coal schooner; left at Santiago when Colonel Humphrey was ordered north.	
Cen Ygnacio de Loyola.....	do	.....	Spanish transport; left at Santiago when Colonel Humphrey was ordered north.	

Arrival of transports in Cuba, showing date of departure, how loaded, and destination—Continued.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning.	Destination.
Bergen.....	Aug. 19	.....	Coal schooner; left at Santiago when Colonel Humphrey was ordered north.	Montauk Point.
Florida.....	Aug. 21	.....	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Bay State.....	do	Aug. 24	Massachusetts State Hospital ship, 100 sick.	
San Francisco.....	do	.....	Spanish transport; left at Santiago when Colonel Humphrey was ordered north.	
Harrisburg.....	Aug. 23	Aug. 26	Steamer collier.....	Porto Rico.
Roumanian.....	Aug. 25	Aug. 29	2 companies 9th Massachusetts Volunteer Infantry and 400 convalescents.	Montauk Point.

NAVAL VESSELS.

Yale.....	June 27	June 30	Light.....	Montauk Point.
Do.....	Aug. 17	Aug. 19	3d and 20th U. S. Infantry (1,055 men).	
Harvard.....	July 1	July 8	Light.....	Do.
Do.....	Aug. 18	Aug. 21	33d Michigan Volunteer Infantry (9,630 men).	
St. Paul.....	July 10	July 21	Light.....	New York.
Do.....	(a)	Aug. 11	2d U. S. Infantry, 1 battalion 71st New York Volunteer Infantry, and General Kent's headquarters (1,200 men).	
St. Louis.....	Aug. 8	Aug. 10	9th and 10th U. S. Infantry and 2 companies 71st New York Volunteer Infantry (800 men).	Do.
Badger.....	(a)	Aug. 18	3 companies 34th Michigan Volunteer Infantry (200 men).	Do.
Resolute.....	July 24	July 24	Light.....	Do.
Do.....	(a)	Aug. 18	Headquarters artillery brigade, lieutenants, and larger part of enlisted men of 4 light batteries, about 120 men on the Specialist to care for horses (250 men).	
Prairie.....	Aug. 20	Aug. 21	3 companies 7th U. S. Infantry (200 men).	Do.
Panther.....	Aug. 26	Aug. 26	2 companies 9th Massachusetts Volunteer Infantry (125 men).	Do.

a Guantanamo.

PRIZE VESSELS.

Mexico.....	In harbor.	Aug. 25	Headquarters 5th Army Corps, 1 company 1st U. S. Infantry (95 officers and men).	Montauk Point.
Mortera.....	do	Aug. 12	Part of 21st U. S. Infantry (18 officers, 268 men).	Do.
Reina de Los Angeles.....	do	.....	Used as hospital ship; left at Santiago when Colonel Humphrey was ordered north.	
San Juan.....	do	.....	Used for carrying passengers and freight between Santiago and other points on the southeast coast of Cuba; left at Santiago when Colonel Humphrey was ordered north.	
Thomas Brooks.....	do	.....	do.....	

NOTE.—Water and coal were furnished all vessels requiring same. Ice was furnished all vessels requiring it after the arrival of ice schooner Chas. B. Baulch, July 30; before which date vessels were compelled to depart without it, there being none to be had.

WASHINGTON, D. C., September 15, 1898

Respectfully submitted.

C. F. HUMPHREY,
Colonel, Chief Quartermaster of the Expedition.

WASHINGTON, D. C., *December 21, 1898.***TESTIMONY OF COL. JOHN D. MILEY.**

Col. JOHN D. MILEY then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By General BEAVER:

Q. Will you please give us your name and rank?

A. John D. Miley, lieutenant-colonel and inspector-general, United States Volunteers, with rank in the Regular Army as first lieutenant of artillery.

Q. Colonel Miley, you were present yesterday during the examination of General Shafter?

A. Yes, sir.

Q. You were on his staff during the war with Spain, were you?

A. Yes, sir.

Q. For what length of time?

A. I left with General Shafter from San Francisco on April 20, and have been with him until the present time.

Q. General Shafter intimated in his testimony that you had personal knowledge of certain things and details of the campaign that he could not speak of from personal knowledge. We will be glad to have you as briefly as possible give in your own way a narrative of the events which came under your personal observation, and of which you have personal knowledge of which General Shafter did not speak, both as to the expedition and preparation of it at Tampa, its embarkation, its disembarkation, the campaign in Santiago, and the return. Just give us a narrative of the events, and, so far as it is necessary to do so, you can traverse the same ground as was covered by General Shafter.

A. What the general meant then was in respect more to duties. There is nothing that I know that he does not know with respect to duties, time, and places.

Q. Well, he intimated that you were on one part of the line, representing him during the fight. He did not see what you did. He therefore spoke of that in a general way, and subsequently you went to the different quarters of the troops and received the surrender. He had no personal knowledge of these things, and it is matters of that kind which will occur to you of which we would like to have some information, if you will just give it to us in your own way, and we will get your personal knowledge in regard to what we have not had full information heretofore. If you choose, you can just begin as follows: I left San Francisco on such a date, and then go on.

A. I left San Francisco with General Shafter on April 20: went en route to New Orleans. Two days after I reached New Orleans General Shafter went to Washington, and on reaching there telegraphed me to move the headquarters to Tampa, where he would join me, and he joined me there on May 1. The whole of the month of May and also until June 7 was consumed in preparing, first, for the expedition to the southern coast of Cuba, afterwards for the expedition to Mariel, as described by General Shafter, and the expedition to Santiago on June 7; and this the general wrote me to dwell especially on, because he made a mistake in respect to dates. On June 7 General Shafter received an order from the President to move on to Santiago immediately, but not to move with less than 10,000 men—that was on the night of June 7. At noon on June 8 the general was ready to go. The troops were then moved to the mouth of the harbor under the convoy of the Navy, and the general, about half past 12 or 1 o'clock, started to go on board, and just before he stepped on the launch a telegram was received by him to delay

the movement until further orders; that was on June 8. The ships that had gotten to the mouth of the harbor were withdrawn and the ships then lay there until June 13, when orders were received that a transport fleet would sail with a strong convoy without regard to Spanish ships, and on June 14 the ships left Tampa. That changes General Shafter's testimony slightly, and he requested me to make those alterations. I called his attention to that last night.

During the time that the ships lay at Tampa the troops were given every facility for bathing during the time between June 8 and June 13; they were also given facilities for going on shore. Most of those troops in turn were alongside the wharf, where the men could freely go from the transport to shore, and often in the morning I would find many of the men lying on the sand, sleeping off the ship. On one occasion one of the regimental commanders—it was reported he did not permit his men to bathe. I was sent personally to see that commander, and told him that every facility should be given for the men to bathe in the bay, and you would see often from 20 to 50 men off the transport bathing; and for this reason I state this particularly, because it has been stated that the men were on board ship with no opportunity for leaving it for seventeen days. Any such case I can not realize that it could have happened, unless the men stayed on board there in preference to going ashore. On leaving Tampa on the 14th—

By Colonel DENBY:

Q. Could the men walk ashore from the ship?

A. Those transports were alongside the wharf, and simply by slipping along the gang plank—they were not all alongside the wharf; about 12 at a time could be alongside the wharf, and it got so that high up in the narrow channel where they were placed that some of them asked to be pulled out of the stream and others had their places, and in that way nearly all of the transports would be near that wharf. Supplies would have to be taken on board, and they made use of that six days' interval to forward the work of fitting out the expedition as much as possible. We reached off Santiago on the 20th, about 11 o'clock. I have nothing further to add to what General Shafter said in that respect. On the afternoon of June 30 all the preparations for the battle were made. General Shafter called all of the division commanders to him at his headquarters. I was present and heard the orders given to the division commanders that night. He asked me if I understood fully what was to be done the next day. I told him that I did; that was right in the evening, just before I went to my tent, and early the next morning, about 6 o'clock, he ordered me to go to the front to El Poso to see the disposition of the troops and look over the ground.

By General WILSON:

Q. That was on the morning of the 1st of July?

A. Yes, sir; it took only about ten minutes to go down. I went up on the hill where Captain Grimes's battery was posted and looked over the ground, and just at that time General Lawton opened fire on Caney. I waited a few minutes and told him just the position of General Sumner's troops, and gave him all the information I could. While I was talking to him Captain Grimes's battery opened fire, fired the first shot, and I hurried back. The artillery duel between Captain Grimes's battery and the Spanish batteries was just commencing, and the divisions of General Kent and General Sumner were in the road leading to Santiago and on the move.

By General BEAVER:

Q. In line?

A. Yes, sir; the cavalry division—General Sumner's division—in front. I stopped a short time at El Poso, and then made some arrangements with respect to orderlies. I took with me four or five orderlies, to be in communication with General

Shafter, and then pushed on with those troops and was with them all the day through. Sumner's division crossed to San Juan and deployed to the right of General Kent before reaching San Juan River. Colonel Derby in a war balloon had discovered a road leading to the west and crossed San Juan about 300 or 400 yards to the right, where the main road crossed to San Juan, and General Kent's division, with the exception of General Hawkins's division, went into that road across to San Juan and made their deployment. General Hawkins's brigade, followed by General Sumner's, had crossed San Juan where the main road to Santiago crossed it, and those divisions had deployed. On the crossing of the river they moved directly on to San Juan Hill, and about 2 o'clock that afternoon had taken the hill. From that time on until night they were employed in strengthening their position and taking points to the right and left of that hill.

Q. Colonel, what was the character of the intrenchments behind which the Spanish were posted beyond the hill?

A. They were pits about 3 or 4 feet deep and 2 feet wide, without any earth thrown up in front of them. The earth was scattered over the surface of the ground, so that you could not discover the intrenchments by reason of the slight elevation or glacis in front of them.

Q. Was there any dirt or barbed wire in front to embarrass?

A. Not put there purposely. There were wire fences for the marking up of the positions of the land—no other defense. They did put up that wire fence and the intrenchments near the city, which were strongly fortified and made stronger by these barbed-wire intrenchments. I was most of the day—I had my position on the crossing at San Juan. There the orderlies would come with instructions from General Shafter, and if I was not there they would wait until I came back.

Q. General Shafter's headquarters were in the meantime at a point from which he could observe both wings of the army?

A. Yes, sir; and twice I received commands from him when he came down to El Poso, and I was surprised to find him so close to me. He had even left the position which he described yesterday—between those lines. He was down at El Poso, and the rest of that time in camp at headquarters of the Fifth Corps.

Q. Was that the point at which you had encamped the night before, or was it at quarters fixed especially in regard to the battle?

A. Where we had camped the night before and where we stayed for sixteen days after that. The high ground was within three or four hundred yards from this point. About 3 or 4 o'clock in the afternoon the general officers on the firing line were anxious for intrenching tools, and Colonel Derby came to the front, and as the ammunition wagons were going to work several of these were detached to pick up all the intrenching tools along the line, and also one or two wagons were detailed to go back as far as headquarters and bring up the intrenching tools that had been carried to that point and deposited there. So shortly after sundown the firing all ceased promptly. The intrenching tools were carried along the line of battle, and the lines were laid out under the superintendence of Colonel Derby, chief engineer of the corps, and by midnight these troops were well intrenched and by morning very strongly intrenched. We had to change the lines. The Spaniards had intrenched on one side of this road.

Q. What was the distance of the line occupied by the Spaniards and finally occupied by our people?

A. Not more than 30 or 40 yards at the farthest. Sometimes that would be inadequate. The wounded in the two divisions were all brought to this crossing of San Juan River, north of which there was an emergency hospital and dressing hospital, and they were sheltered to a great extent by the bluff along the river about 4 or 5 feet high, where the men could be laid under this bluff and practically be free from injury from the bullets. One or two men in the hospital were shot after they were there. That was the only place we could find, and, being the best

place, the hospital was placed there. About 4 o'clock in the afternoon, probably half past three, these wounded men were moved. The movement of these wounded to the division hospital back of headquarters was begun. Four, five, or six, according to the condition of the men, were placed in the ammunition wagons and the ration wagons and were taken to the rear. I think that by about 10 o'clock that night all those men were out of there and taken to the division hospital.

Q. What was the distance, Colonel, from the crossing of the San Juan River, where they were, to the dressing station and the hospital?

A. About $1\frac{1}{2}$ miles.

Q. Had any preparation been made to ascertain the position of the Spanish lines before the actual fight began?

A. That morning?

Q. Yes, sir.

A. All the provisions were made the night before.

Q. Were their lines well developed?

A. We knew where they were.

Q. Yes?

A. Oh, yes, sir; at noon on the 30th there were—General Shafter and five or six of his staff officers were down against the Spanish pickets at El Poso. We were all on El Poso Heights, and with the glass we could trace the Spanish lines on San Juan.

Q. There was no necessity for any reconnoissance?

A. No doubt of it. Then General Lawton and General Shafter at the same time—they were together and were over around El Caney at this very same time; that occupied all the morning of the 30th; that was in addition to the work that Colonel Derby was doing. Colonel Derby was at work the second day after we got there.

By General WILSON:

Q. Will you let these gentlemen know who Colonel Derby is?

A. An officer of the corps of the Chief of Engineers.

By General McCook:

Q. Will you please state where the officers engaged under Colonel Derby were from?

A. Why, they were from the infantry and cavalry school, picked out especially for that purpose.

Q. That is, for reconnoissance?

A. Yes; and on that point I wish to say further that General Wheeler on the 26th was instructed by General Shafter to—there was a letter; I noticed it yesterday—"In riding over the field reconnoiter carefully the road leading off to Caney;" that he would probably want to use that road. That was on the 26th. General Shafter had that thought in his mind then, and it was done as far as possible. Before our troops got up there that country was infested by Spanish pickets—it was low and we could not get over the ground very well; you could simply push your way to El Poso, to some ground in the rear of that from which you had an excellent view of Santiago, and there was no mistaking where the Spaniards were.

By General BEAVER:

Q. Had they no picket lines or skirmish line in advance of their position?

A. Yes, sir; they had a picket line and came down within 200 yards of our line on the morning of the 30th.

Q. But you drove them off, or did you walk over it?

A. We walked over it; there was no resistance. Now, there has been a great deal of talk about sharpshooters on the flanks. I don't think there was a single

sharpshooter behind our firing line. I am positive of it, for I made an investigation several times to ascertain whether there was any reasonable grounds for such a supposition.

Q. You investigated rumors?

A. Yes, sir; several times during the 1st, all day of the 2d, and the morning of the 3d, when they would say there was such and such a person had seen a sharpshooter. Some had been shot at and some had been killed, but you couldn't find anything to substantiate it. There were, undoubtedly, sharpshooters between our lines and the Spanish lines, up in the trees. There is no doubt about that. Officers have said that they have seen those men, but as for sharpshooters firing into our hospital in the rear or on the flanks, there were none of them.

Q. That would very readily gain credence from the fact that the Spanish rifle had a very long range?

A. Yes; the Spanish rifle had a range of about 2 miles, especially when they got firing at us at 3 o'clock on the afternoon of the 1st, and those bullets did not hit the top of the hill, where the American lines were deployed, but went in the rear anywhere from a mile to a mile and a half, and it was more dangerous to be half a mile in the rear of our lines than to be on the lines.

Q. Colonel Miley, were General Shafter's headquarters in the place that was most convenient for observation of the operation of both wings of his army and most convenient for the transmission of intelligence from both wings?

A. Yes, sir; both on account of the roads and on account of the lay of the country. If he had gone to El Poso he could not have seen Caney—Caney was shut off entirely. If he had gone over to Caney, San Juan would have been shut off entirely. Where it was half a mile away between the two, the location permitted him to observe both ways and to see all the ground in front of Santiago which lay between Santiago and our headquarters.

Q. Was that a favorable position for observing the ground intervening between the two wings?

A. Yes, sir; the most favorable position for that.

Q. That was the delicate part of your position, was it not?

A. No, sir; we didn't apprehend any trouble there.

Q. No roads by which the Spaniards could come between the two wings of the army?

A. We found afterwards some roads, but we did not know of them at the time.

Q. They were absolutely on the defensive?

A. Yes, sir. We never thought that.

Q. That there was danger?

A. The general may have; I don't know; the great danger was that on the right.

Q. You were not at Caney at all?

A. No, sir. I left, as I say, early in the morning for San Juan, and I did not go back to headquarters until about 9 o'clock at night.

Q. What time did General Lawton come up so as to join the right of the line as it was?

A. His movement was not completed until 12 o'clock on the day of the 2d. At 7 or 8 o'clock on the night of the 1st a staff officer from General Lawton came to corps headquarters and informed General Shafter that General Lawton's advance on to Santiago had been checked by the Spanish outposts and that General Lawton did not know what was in front of him and hesitated about going any farther that night. He was prepared to leave Caney in time to make that movement during the daylight, so General Shafter sent word to him to retrace his steps, come back to headquarters, marching the front over the road used by General Kent and General Sumner, and then take his position on the right; so he marched all night of the 1st and completed that move by the 2d.

Q. That was by the roads that we had possession of?

A. Yes, sir.

Q. So far as your observation went, Colonel Miley, how were the wounded cared for, both on the front line at the first dressing station and at the division hospital?

A. Well, I judge by the energy displayed by the doctors, and from that I should judge that they were taken care of very well indeed. I saw that dressing station from time to time all day of the 1st.

Q. Were the surgeons at the dressing station?

A. Yes, sir.

Q. All surgical instruments and facilities for caring for the wounded?

A. There were four or five surgeons constantly at this dressing station at San Juan. Early on the morning of the 2d I went through the general hospital, and on the 3d I was through the general hospital, and at different times after that, and I thought that everything that could be done was done with what we had at hand.

Q. Were there any rumors or intimations at the time that wounded men crawled off into the woods and were neglected and left there to die?

A. Oh, yes, sir; it was supposed so, and every effort was made to find those as soon as the firing began on the 3d. One of the first instructions that was issued to each regiment was that each regiment should carefully look after such men if there were any.

Q. Were any bodies found, do you know?

A. I found one man on the 3d. About 9 o'clock Colonel Derby left headquarters to reconnoiter for an artillery position, and we went into a country that had not been gone into before, and we found a negro soldier on the high ground about 500 or 600 yards from the road taken by General Kent on the 1st, who evidently had crawled up there and died or else had gone up there and been shot by a stray bullet. I am inclined to think the former, because the colored soldiers were not in the habit of going off in that way.

Q. Was his body despoiled in any way?

A. No, sir.

Q. So that he could not have been murdered for what he had on him?

A. Of course he had lain there for three days.

Q. Were there any conditions that attracted the vultures, so that they indicated the presence of dead bodies, at all?

A. They were so thick everywhere that I don't think that anybody could be led to find a body in that way. Everywhere you went there they were just as thick as they could be.

By Governor WOODBURY:

Q. Was that before the battle or after?

A. I did not notice that before the battle. You see, we got up there on the 29th and were there the 29th and 30th. I did not particularly notice the vultures until the 1st day. It impressed me at that time on the 1st.

By General BEAVER:

Q. The division of General Hawkins continued the fortifications—the earth-works, did they?

A. They continued them on to the right and kept pushing them down there until finally, about the 8th or 9th—the 9th—the right rested on the bay. General Ludlow's right rested on the bay. He commanded General Lawton's right brigade.

Q. You had the city completely surrounded, with the right flank on the bay?

A. Completely invested. General Shafter kept pushing General Lawton around to close what was known as the Cobra road. On the 3d of July at 12 o'clock the truce began, and that lasted without intermission until the surrender, with the exception of the afternoon of the 10th and the morning of the 11th, and during that time negotiations were going on with a view to securing the surrender without making an assault upon the city.

Q. That truce did not interfere with your pushing your lines around?

A. Not a bit. We did not let it interfere, but on one occasion the Spanish commander invited our attention to the fact that we were pushing on up too close for a state of truce, and we dropped back; but they were doing the same thing, but they thought that we were a little more energetic than they. He objected in writing.

By General DODGE:

Q. What was the intention of the attack or feint upon Calaberas? Was that on the night of the 1st?

A. Oh, yes, sir. That was to hold the troops at Calaberas and prevent them from joining the troops at San Juan. Those were the orders that were given to the commander of the troops—given to him in writing. It was simply to engage the enemy and to hold them.

By General McCook:

Q. Did they hold them?

A. Oh, yes; the Spanish troops stayed there. The commander of the troops succeeded in keeping the Spanish troops there.

By Captain HOWELL:

Q. I simply want to ask you, Colonel, what benefit, if any, and what was the assistance to the commanding officer there of the balloons that were in operation?

A. At the time—on the day of the 1st—when the balloon attracted so much fire, I thought it was of no assistance, but I think now it was of additional benefit.

By General WILSON:

Q. Of what benefit was it?

A. By means of the discovery of a side road, over which General Kent moved, it facilitated the movement of the troops to the front and enabled General Kent and General Sumner to move simultaneously on San Juan, and I doubt if they would have been enabled to do so had that side road not been discovered. The road was very narrow, and was filled with troops; that it would have been almost impossible to have held General Sumner's division in check until General Kent's division had deployed to the left if they both would have required to move to the front on the same road.

By Captain HOWELL:

Q. Did you have frequent communications from the balloon?

A. Yes, sir; the balloon was up there only about ten or fifteen minutes; it was not there long.

Q. Did they give you this information?

A. Well, Colonel Derby—it was the balloon started from a corps somewhere near corps headquarters, early in the morning; towed by four men; occupied by Colonel Derby, and I think Colonel Maxfield, of the Signal Corps, and probably one or two others, came down the road moving past the troops and came within 200 yards of the San Juan crossing. The Spanish troops allowed that balloon to get to that position before they concentrated their fire on it with shell musketry, and I think it was not up there more than ten minutes; the time passed very quickly, and I really can not say how long it was. It was hit twice while they were trying to get it down. Colonel Derby discovered that road and gave information to General Kent, and he put his troops into it at once.

Q. That was the only occasion that you used the balloon?

A. Yes, sir; that was the only occasion. The balloon was ruined; it was hit and hit with pieces of shell and musketry.

Q. Of what service to your army was the Signal Corps? Was it of good service?

A. It was of the greatest service in establishing communication by telephone

with all portions of the army. We had a telephone at headquarters from which we could communicate with Daiquiri, the depots at Daiquiri, the depots at Siboney, and with General Lawton's division on the right, General Wheeler, General Kent, and General Bates, taking them from right to left in order, and also with a special station at El Poso, where there was a provost guard and troops, and halfway to the points of reserve, etc.

Q. Were the lines established as the troops arrived, promptly?

A. Promptly. There would be a movement ordered, and by the time that movement was completed they would have the telephone installed, with that promptitude the Signal Corps did its work.

Q. Have you any criticism to make of the conduct of your Signal Corps?

A. None at all.

Q. All was done that could be done?

A. I do not see how anything more could have been done. They did everything they could, and had everything to do it with.

By General WILSON:

Q. Speaking of the opening of the fight on July 1 with Grimes's battery, did you have an opportunity to visit the battery to see the character of guns?

A. The artillery duel was between the guns of San Juan and El Poso. There was no artillery at El Caney, no artillery at all. There was one or two old obsolete guns.

Q. At San Juan were there any marine guns?

A. At San Juan they had field guns—marine field guns. They had two or three of them, which were withdrawn back into the city, and they had also some 4 and 5 inch bronze guns that had been converted to a rifle, and they used those, and with really good effect. They got the range fairly well.

Q. Then there were three marine field guns?

A. Yes, sir; I think there were three that I remember.

By General DODGE:

Q. Were the mines at the entrance of Santiago taken up by your forces—the torpedoes?

A. They were taken up by our forces in cooperation with the Spanish forces. That was the provision made in the terms of the surrender, and they were most of them exploded and some of them were simply marked. Those that would not explode were marked and buoyed, so that the incoming vessels could see where they were, but they were taken up afterwards; but that was the disposal of the mines on the first day to allow our ships to come in. We have a record of every mine, showing what was done with it—whether it was blown up or not. There were over 20.

By General WILSON:

Q. Were they taken up by the Navy or by the Army?

A. I think they were probably taken up by the Navy. I do not know. Immediately one battery of artillery went down to take possession of the fortifications at the entrance, and the Spanish engineer officer took charge of the firing torpedoes and exploded those mines.

Q. Did they work well, as far as you heard?

A. Very well indeed—they all did, except four, five, or six, or something of that sort.

Q. Could the army see the Spanish fleet leaving the harbor there in the morning—the men on the right?

A. On General Lawton's extreme right they could see it—it could be seen. It could be seen going out, and that was the first intimation we got of their going out on the right of our lines, before we heard from Siboney. Afterwards we heard that they were going out; but the first intimation we got was from the extreme

right—a commanding officer of a troop of cavalry brought the news. The surrender took place on the 17th, and on the 19th I left with two troops of cavalry with instructions from General Shafter to receive the surrender of the garrisons in the interior of Cuba. There were garrisons at El Cristo, El Songo, Dos Caminos, San Luis, and Palma Soriano. After I had been gone five days, I returned to Santiago and asked for a regiment of infantry to distribute as garrisons in these places; and then three days later I returned to Santiago, and shortly afterwards was dispatched to the northern coast of Cuba to receive the surrender of the garrisons at Baracoa and Guantanamo. This trip lasted five days, and on my return I remained at Santiago until the departure for Montauk.

By General BEAVER:

Q. What was the correct number of prisoners, by actual count, included in the surrender?

A. There were 23,000; very nearly 23,500.

Q. Had you any special difficulty in securing the actual surrender of these troops at any particular garrison?

A. Actually I had no trouble, but at nearly every place they sent word to me that if I came to the garrison I would be fired upon, and at San Luis I feel sure I would have been fired upon had it not been for the Spanish officer with me. The flag of truce was carried continuously, but in spite of that I feel sure I would. The Spanish officer who was with me was in advance about 100 yards and hurried to the trenches and gave orders to the troops not to fire. They had been ordered to fire.

Q. You were accompanied, then, by an accredited representative of General Toral?

A. Yes; but at San Luis they would not accept him, stating it was a ruse of war; that we had captured this officer and were compelling him to do our bidding, and they then wished me to wait until they could send a man if I would send a guard with him, and this man went to Santiago, and afterwards when I went there I took numbers of these men with me the rest of the way.

Q. When you came north, you went to Montauk, did you?

A. Yes, sir.

Q. When did you land there?

A. Landed there on the last day of August.

Q. In general, what was your impression of the camp and the facilities for caring for the men who had gone through that campaign?

A. When I arrived there and during the month of September—and during the whole of the month of September I was there—I think that every facility for caring for the men was furnished, and that the camp was a most excellent one in every respect.

Q. As to all the supply departments—commissary, quartermaster, medical?

A. Yes, sir; I cover the time from when I arrived there on the last day of August until I left there about the last day of September.

Q. Was the condition of the men visibly improved by their stay in camp there?

A. Wonderfully, sir, compared with the condition as I observed it at Santiago.

WASHINGTON, D. C., *December 21, 1898.*

STATEMENT OF MAJ. GEN. NELSON A. MILES.

Maj. Gen. NELSON A. MILES then appeared before the commission, and was asked by General Dodge if he desired to be sworn. He stated that he could make his statements without being sworn, and was responsible for what he said.

By General BEAVER:

Q. Will you please give us your full name and rank in the Army?

A. Nelson A. Miles; major-general, U. S. Army.

Q. To what extent, General, were you in a situation during the war with Spain to observe the manner in which the several supply departments of the Army furnished the troops with what was necessary for field operations?

A. I had a fair opportunity to observe the method of supply and the appliances that were utilized.

Q. At what points?

A. The entire Army, as far as my position gave me an opportunity of observing.

Q. Were you at Tampa during the fitting out of the expedition which finally went to Santiago?

A. Yes, sir.

Q. What was your impression as to the manner in which that expedition was fitted out for the service which it was finally called upon to render?

A. The troops were assembled first at New Orleans, Mobile, and Tampa. Then other troops were mobilized at Chickamauga—some at the same time—cavalry and artillery. The cavalry and artillery were afterwards moved to Tampa. There were three expeditions practically ordered—first, the movement of the troops to those points which I have mentioned; then the concentration of almost the entire regular cavalry and infantry and light artillery at Tampa; and then, later, about the 8th or 9th of May, an army of 70,000 men was ordered to Cuba, and supplies for 70,000 men for ninety days were ordered sent to Tampa, and thirty days' supplies for the animals. That occasioned much confusion on the railroads. At one time there were nearly 1,000 cars loaded with munitions of war of various kinds. Of course, it was impossible to unload them, because there were no Government storehouses at Tampa at the time, and they were side-tracked, at one time as far back as Columbia, S. C.

At the time that I speak of an expedition was authorized to be sent to the south coast of Cuba, to a place called Tunas. The purpose of that was to form a junction with Gomez's forces, who were operating in that part of Cuba in the hills and mountains—a healthy part of Cuba. The purpose was to send supplies to his forces, forming a junction with him and rendering whatever assistance was necessary without coming in contact with the main force of Spaniards. General Shafter was selected for this command, and I think when it was about ready to sail the Navy had information of the movement of Cervera's fleet to the West Indian waters, and it was a question whether the expedition could go down and accomplish its object and return before our Navy would need all their ships to fight and cope with the Spanish fleet; hence that movement was suspended. Then, later, when it was reported that the Spanish fleet had taken position in the harbor of Santiago, orders were sent directing that an expedition be sent to assist the Navy, and it was hoped that 25,000 men could be sent. It was understood that transports could be obtained that would carry that number of men. The available force at Tampa of the regulars was about 15,000. An additional 10,000 men were ordered to be selected from the best equipped at Chickamauga and sent to Tampa to join this force, but when the transports came to be loaded it was found that it was impossible to put more than 15,877 officers and men on the transports, and they were equipped as well as it was possible under the circumstances and within the time, because the matter of time was of very great importance. Telegrams were received from Washington urging the movement to be as expeditious as possible, and finally the expedition sailed from Tampa equipped in that way.

Q. You were present at Tampa until after the expedition sailed, were you, General Miles?

A. Yes, sir.

Q. Were the transports equal to carrying the number of men who were embarked upon them under the circumstances that might have been naturally expected at that season of the year, in your judgment?

A. No, sir; it was most fortunate for the troops that they had good weather from the time that they set sail until the time they reached Cuba. If they had encountered a severe storm the loss of life, or suffering, at least, must have been fearful on the part of the men. As it was, on a smooth sea and fair weather, the men that were assigned to positions down in the hold of the ships, crowded in with mules and horses, could get out on the upper deck and in the rigging, and the sea breezes made them comfortable. If they had encountered a storm the hatches would have had to be closed, and it would have been very serious.

Q. To what extent was this expedition supplied, as far as your observation enabled you to judge of it, with commissary and quartermaster stores, with ammunition and medical supplies?

A. As regards quartermaster stores—of course the troops took with them the clothing which they were accustomed to wear. Some of the troops, a few, came from the Southern States. Most of the regular regiments came from the Middle States, from the lakes, and from the Northwest, where they were accustomed to wear woolen underclothing. There had not been time to obtain suitable clothing for the Tropics. As far as the camp equipage and arms are concerned, the regular troops were fairly well equipped. They had the modern rifle. The volunteer troops were not so well equipped. They had the Springfield rifle and black powder, and they had had no opportunity for target practice. I think in the Seventy-first New York Regiment it was reported to me there were 300 men who had never fired a shot before going to Tampa. As far as the commissary stores were concerned, I think there was a sufficient amount of the kind furnished; that is, of the kind that was furnished. The medical supplies were not sufficient.

Q. Just there a moment, General; what supplies?

A. The medical supplies were not sufficient. The equipment of the Army varied somewhat, as the troops were from different States. Some troops were abundantly supplied and had more than they required; a much larger amount of baggage than could be authorized. Others were sent into the field in just the old clothes that they happened to enlist in—some in their shirt sleeves—with very inferior tentage and short of such articles as blankets and things of that kind. In order to insure uniformity and to enable them to have what was absolutely essential and the maximum allowance that could be carried with the minimum amount of transportation, I issued this order on the 25th of May, known as General Order No. 54, which is as follows:

GENERAL ORDERS, }	HEADQUARTERS OF THE ARMY,
No. 54. }	ADJUTANT-GENERAL'S OFFICE,
	Washington, May 25, 1898.

The following standard of supplies and equipment for field service is published for the information and guidance of troops in the military service of the United States. The allowance is regarded as the minimum for field service:

Headquarters of an army corps.—Three wagons for baggage, etc., or 8 pack mules; 1 two-horse wagon; 1 two-horse spring wagon; 10 extra saddle horses for contingent wants; 2 wall tents for commanding general; 1 wall tent for every two officers of his staff.

Headquarters of a division.—Two wagons for baggage, etc., or 5 pack mules; 1 two-horse spring wagon; 1 two-horse wagon; 5 extra saddle horses for contingent wants; 1 wall tent for commanding general; 1 wall tent for every two officers of his staff.

Headquarters of a brigade.—One wagon for baggage, or 5 pack mules; 1 two-horse spring wagon; 2 extra saddle horses for contingent wants; 1 wall tent for the commanding general; 1 wall tent for every two officers of his staff.

Allowance of transportation for regiment of cavalry, 49 wagons or 144 pack animals.

Allowance of transportation for battery light artillery, 4 wagons.

Allowance of transportation for regiment of infantry, 25 wagons.

Supplies to be carried in wagons per company: Ten days' field rations per man, 100 rounds of ammunition per soldier, 250 pounds of officers' baggage and supplies, tentage, grain for animals, utensils for each company mess, not to exceed 350 pounds for each troop, battery, or company; horseshoes, nails, tools, and medicines for cavalry horses, not to exceed 300 pounds; to each soldier or civilian employee (compactly rolled in one piece of shelter tent) 1 blanket, 1 poncho, and 1 extra suit of undergarments.

Whenever the amount of rations or grain varies from the above, the weight to be carried per six-mule wagon may be increased or diminished, but should not exceed 4,000 pounds, and for four-mule wagon 3,000 pounds, and if possible should be less per wagon.

Whenever obtainable on line of march, full forage will be allowed all animals; the rate of purchase to be regulated by the Quartermaster's Department.

To be carried on the person or horse: One overcoat, 1 piece of shelter tent, 50 rounds of rifle or carbine, and 24 rounds of revolver ammunition.

Supplies to be carried on pack-mules for one troop of cavalry: Five days' field rations per man, 100 rounds of ammunition per soldier.

The utensils for each troop of cavalry must not exceed 350 pounds.

The weight of load per aperejo must never exceed 250 pounds, and should, if possible, be less than 200 pounds.

Troop of cavalry, company of infantry, or light battery.

	Troop of cavalry.	Com- pany of infantry.	Light battery.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
Field rations, 10 days: Cavalry, 100 men; infantry, 106; artillery, 125.	3,640	3,858	4,550
Ammunition, 100 rounds: Cavalry, 100 men; infantry, 106 men.	725	769	-----
Officers' baggage and supplies.	250	250	250
Tentage (7 conical wall for cavalry and infantry, each: 9 for light battery)	854	854	1,098
Grain for animals, 10 days, 6 pounds: Cavalry, 115; infantry, 12; artillery, 126.	6,900	720	7,560
Utensils for each company mess.	350	350	350
Horseshoes, nails, tools, and medicines for cavalry and artillery horses.	300	-----	325
Soldiers' baggage: Each 1 blanket, 1 poncho, 1 extra suit of undergarments, and 1 piece shelter tent.	1,662	1,761	2,078
Total.	14,681	8,562	16,211

By command of Major-General Miles:

H. C. CORBIN, *Adjutant-General.*

That regulated the amount of clothing, tentage, and camp equipage, with transportation and everything except medical supplies. That was a matter about which I preferred to have the judgment of the highest medical authorities, and the order regulating the amount of medical equipment was not issued until some time later; that is, the allowance for ambulances, tents, stretcher bearers, mounts, etc., concerning which I called for the recommendation of the medical officer that had been assigned to my headquarters.

Q. Colonel Greenleaf, was it?

A. Yes, sir; he made his recommendations on the 11th and 12th of May. They were approved on the same days by myself, and were then referred to the Surgeon-General for his indorsement, and afterwards forwarded to the Secretary of War; but the order was not published making allowance for the medical transportation, tentage, etc., until the 22d of June. This allowance had to be made by the direction of the Secretary of War, as it required the purchase of tentage,

transportation, etc. Colonel Greenleaf's recommendations and the indorsements on the same are as follows:

HEADQUARTERS OF THE ARMY, OFFICE CHIEF SURGEON,
Washington, D. C., May 11, 1898.

The ADJUTANT-GENERAL, *Headquarters of the Army.*

SIR: I have the honor to submit herewith an estimate of wheeled transportation and tentage required for use of Medical Department in the field:

Transportation.—Ambulances, 1 to 400 of combatant troops; army wagons, 1 to 600 of combatant troops; escort wagons, 1 to each brigade.

Tentage.—Hospital tents, 1 to 300 of combatant troops; common tents, 1 to 1,200 of combatant troops.

Very respectfully, your obedient servant,

CHARLES R. GREENLEAF,
Colonel, Assistant Surgeon-General, U. S. A.,
Chief Surgeon, Army in the Field.

[First indorsement.]

HEADQUARTERS OF THE ARMY,
Washington, May 11, 1898.

By the Major-General Commanding to the Quartermaster-General, through the Adjutant-General.

J. C. GILMORE,
Assistant Adjutant-General.

[Second indorsement.]

ADJUTANT-GENERAL'S OFFICE,
Washington, May 11, 1898.

Respectfully transmitted to the Quartermaster-General.

WM. H. CARTER,
Assistant Adjutant-General.

Asst. Surg. Gen. Charles R. Greenleaf, chief surgeon army in the field, Washington, D. C., May 12, 1898, informs that, exclusive of the animals for ambulance and other wagons used by the Medical Department in the field, there will be required for mounts and pack transportation:

1,038 horses..	{ H. S. requiring mounts	420
	{ A. H. S. requiring mounts	152
	{ Privates requiring mounts	466

Two hundred mules (1 per regiment and the necessary equipment). Also, 3,500 hand litters with slings (1 per company and 2 per ambulance). Under the law the Hospital Corps must now man all transportation required by the Medical Department.

HEADQUARTERS OF THE ARMY, May 12, 1898.

Approved by the Major-General Commanding and referred by him to the Quartermaster-General.

J. C. GILMORE,
Assistant Adjutant-General.

Asst. Adj. Gen. Theodore Schwan, May 14, 1898, refers, by order of the Secretary of War, to the Surgeon-General. Special attention is invited to the decision contained in the concluding sentence of the letter of April 25, 1898, from "this office."

The Surgeon-General's remarks on recommendations in view of said decision are respectfully requested.

MAY 16, 1898.

Respectfully referred to Col. Charles R. Greenleaf, assistant surgeon-general, United States Army, chief surgeon troops in the field, for remark.

G. M. STERNBERG, *Surgeon-General.*

MAY 16, 1898.

Received back. Colonel Greenleaf states: "My estimate is for mounts for Hospital-Corps men serving with the division ambulance companies and with medical officers on the march and in action. It does not refer to dismounted organizations. Under existing regulations the full allowance of mounts would be 1,417; but it is my hope to make 1,038 do the work with the adopted field organization."

MAY 16, 1898.

Respectfully returned to the Adjutant-General of the Army, inviting attention to preceding indorsement.

G. M. STERNBERG,

Surgeon-General United States Army.

WAR DEPARTMENT, SURGEON-GENERAL'S OFFICE,

Washington, June 18, 1898.

The ADJUTANT-GENERAL, *Headquarters of the Army.*

SIR: I have the honor to recommend the publication of a general order announcing the official allowance of mounts, wheel transportation, and tentage, etc., for the Medical Department of the Army in the field, as follows, viz:

Horses for mounts.

	H. S.	A. H. S.	Privates.
To each—			
Regiment of infantry.....	1		1
Artillery battalion, 3 light batteries.....		3	1
Cavalry regiment.....	1		2
Corps headquarters.....	1		2
Division headquarters.....	1		1
Brigade headquarters.....	1		1
Division ambulance company.....	7	3	12
Corps reserve ambulance company.....	7	3	12
Division field hospital.....	2	2	6
Corps reserve hospital.....	2	2	6

Wheel transportation.—One ambulance to 400 men of the effective force; one 4-horse wagon to 600 of the effective force; one 4-horse wagon to each brigade.

Tentage.—For each ambulance company: 17 common tents for privates; 2 common tents for noncommissioned officers. For each division field hospital: 15 common tents for privates; 2 common tents for noncommissioned officers; 1 common tent for supplies.

Hospital tents on a basis of six patients (beds) to each tent.

Hand litters, with slings, to be furnished by the Quartermaster's Department: 1 for each company, 2 for each ambulance.

Requisitions for the necessary articles of camp and garrison equipage, tools, etc., will be based on the official allowances for companies of infantry.

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Requisitions for the before-mentioned supplies will be sent in separately for divisions, with statement whether or not the division organization is complete.

Horses and wheel transportation will be furnished by the Quartermaster's Department, and horse equipments by the Ordnance Department.

Very respectfully,

CHAS. R. GREENLEAF,
Assistant Surgeon-General, U. S. Army,
Chief Surgeon, Troops in the Field.

[First indorsement.]

HEADQUARTERS OF THE ARMY,
Washington, June 20, 1898.

Approved by the major-general commanding.

J. C. GILMORE,
Assistant Adjutant-General.

[Second indorsement.]

ADJUTANT-GENERAL'S OFFICE,
Washington, June 21, 1898.

Respectfully referred to the Surgeon-General, and to the Quartermaster-General, U. S. Army, respectively, for remark.

By order of the Secretary of War:

H. O. HEISTAND,
Assistant Adjutant-General.

[Third indorsement.]

WAR DEPARTMENT, SURGEON-GENERAL'S OFFICE,
June 21, 1898.

Respectfully returned to the Adjutant-General of the Army, through the Quartermaster-General of the Army, approved and recommended.

GEO. M. STERNBERG,
Surgeon-General, U. S. Army.

[Fourth indorsement.]

QUARTERMASTER-GENERAL'S OFFICE,
Washington, D. C., June 21, 1898.

Respectfully returned to the Adjutant-General, concurring in the recommendation of the Surgeon-General of the Army.

M. I. LUDINGTON,
Quartermaster-General United States Army.

Approved by the Secretary of War:

H. C. CORBIN, *Adjutant-General.*

JUNE 22.

The following is the order as issued:

GENERAL ORDERS, }
NO. 76. }

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, June 22, 1898.

I. By direction of the Secretary of War, the following allowance of horses for mounts, wheel transportation, tentage, etc., for the Medical Department of the Army in the field is authorized:

Horses for mounts.

	H. S.	A. H. S.	Privates.
To each—			
Regiment of infantry	1		1
Artillery battalion (3 light batteries)		3	1
Cavalry regiment	1		2
Corps headquarters	1		2
Division headquarters	1		1
Brigade headquarters	1		1
Division ambulance company	7	3	12
Corps reserve ambulance company	2	3	12
Division field hospital	2	2	6
Corps reserve hospital	2	2	6

Wheel transportation.—One ambulance to 400 men of the effective force. One 4-horse wagon to 600 men of the effective force. One 4-horse wagon to each brigade.

Tentage.—For each ambulance company: 17 common tents for privates; 2 common tents for noncommissioned officers. For each division field hospital: 15 common tents for privates; 2 common tents for noncommissioned officers; 1 common tent for supplies; hospital tents on a basis of six patients (beds) to each tent.

Hand litters, with slings, to be furnished by the Quartermaster's Department: 1 for each company; 2 for each ambulance.

Requisitions for the necessary articles of camp and garrison equipage, tools, etc., will be based on the official allowances for companies of infantry.

Requisitions for the before-mentioned supplies will be sent in separately for *divisions*, with statement whether or not the division organization is complete.

Horses and wheel transportation will be furnished by the Quartermaster's Department and horse equipments by the Ordnance Department.

II. Commanding generals of army corps are directed to detail, upon the application of chief surgeons of corps, two line officers not above the grade of first lieutenant for duty as acting assistant quartermasters with the medical service of each division.

By command of Major-General Miles:

H. C. CORBIN, *Adjutant-General.*

Q. So that order was issued after the expedition to Santiago had left?

A. That order was issued after the expedition had started, and that could only be issued by the Secretary of War, because he was the only authority who had the power to authorize amounts for the purchase of ambulances, litters, horses, hospital tents, etc.

Q. Prior to that time what regulated the amount of medical and hospital supplies and stores for the Medical Department?

A. That was regulated by the publication of a field-supply table in pamphlet form, May 9, by authority of the Secretary of War, giving the amount of medical supplies—this, General Order No. 76, is for the tentage, transportation, and animals.

Q. To what extent was the expedition supplied, or the facilities for supplying it at hand, at Tampa with ambulance and hospital tents and other hospital supplies for the field?

A. Well, there was a fair amount of supplies of that character. That matter was left largely to the commanding general, who had the direction of loading the expedition.

Q. You left the details of loading of all the supplies largely in the hands of the corps commander who was to be in charge of the expedition?

A. Yes, sir; I gave general directions about it, and before it sailed I called for a report, to know more particularly about the appliances for disembarkation and the care of the men after they left there.

Q. Had the question of disembarkation of the troops after reaching its destination been carefully considered by you and General Shafter?

A. Yes, sir; he not only had his own staff officers to attend to that, but, in addition to that, General Ludlow was directed to provide himself with everything that was required. He went to West Point and Willets Point and obtained appliances for disembarking. They were placed on a steamer in New York, and I supposed at the time that they had all they required; in fact, I inquired of him if he had made every provision, and he seemed to feel confident that he had, but when I got to Tampa I discovered that he had not. He had provided a certain number of boats—pontoon boats and small boats—that were utterly useless in the heavy surf. These boats would have been very good for putting a bridge across a pond, but the boats he took were not suitable to land stores in a heavy surf. I found there, however, two large barges which had been built for the Navy and succeeded in getting the owner to let us have them. I gave directions to have them purchased, and they were sent with the expedition. There ought to have been a good many more, but those were the only ones obtainable at that time and place. They were sent with the expedition; one was lost at sea and the other was used to disembark the supplies at Siboney.

Q. Had you any information, General, prior to the sailing of that expedition of a communication sent by the Secretary of the Navy to the Secretary of War, dated May 31, 1898, reading as follows:

“NAVY DEPARTMENT, *Washington, May 31, 1898.*

“SIR: This Department begs leave to inquire what means are to be employed by the War Department for landing the troops, artillery, horses, siege guns, mortars, and other heavy objects when the pending military expedition arrives on the Cuban coast near Santiago.

“While the Navy will be prepared to furnish all the assistance that may be in its power, it is obvious that the crews of the armored ships and of such others as will be called upon to remove the Spanish mines and to meet the Spanish fleet in action can not be spared for other purposes, and ought not to be fatigued by the work incident to landing of the troops, stores, etc.

“Very respectfully,

“JOHN D. LONG, *Secretary.*

“The honorable the SECRETARY OF WAR.”

A. I had no knowledge of that communication.

Q. Now, in regard to the disembarkation and in planning for it, did you take it for granted that you would have the cooperation of the Navy?

A. That was understood before the fleet sailed from Tampa. It was understood and discussed by the commanding officers—myself and the navy officer—and an estimate made of the number of boats that could be furnished from the transports, and also of the number that could be given to assist us from the Navy; and it was understood before they left Tampa, and the most cordial assurance of assistance was given.

Q. That was your understanding with the ranking officer of the naval expedition that went with the army expedition?

A. Yes, sir. The expedition should have been furnished, independently of the Navy, with launches—naphtha or steam launches—or tugs for towing boats and barges from the ships to the shore. I relied largely upon the engineer officer and the Engineer Department to furnish that. In the second expedition, to Porto Rico, those things were furnished, but they were kept and delayed at Santiago, so they never reached us until after the campaign was practically over.

Q. That naturally leads to the question which I suppose will be the principal one upon which we would like to have your statement; and that is, the campaign in Porto Rico. Will you kindly give us, General, in a general way, a statement

of the organization of the expedition which sailed to Porto Rico and its disembarkation—where it embarked and where it disembarked, and what were the operations which led to the condition of things which existed at the time of the signing of the protocol?

A. Well, I could tell you that better in my office; or if you care to send for a map of Porto Rico, you could perhaps get a better idea of it. My messenger is outside. In my judgment, the problem was at first a naval problem. It was a question whether our fleet could destroy the Spanish fleet or whether theirs could destroy ours. If they could destroy the United States fleet, we would have been blockaded for a number of years; and on the other hand, also, if we had a force in Cuba we would have lost that force, as it would have been impossible to have returned it back to the United States again. Therefore I was opposed from the start to placing a large force in Cuba until that question was determined. First, for that reason; and, second, I was opposed to sending a large force to a place like Havana or Matanzas in the sickly season, as I was satisfied that before they accomplished their object a large percentage must die of yellow fever. Therefore I thought it advisable to operate against the Spanish forces by doing them the greatest amount of injury with the least to ourselves, harassing them during the sickly season, giving all the aid and support possible to the insurgents, and taking such places as we could during the rainy season or sickly season without endangering the lives of our own troops from disease.

I was from the first in favor of taking Porto Rico, in order that the Spanish forces could not use it as a base against us. I was satisfied we could move forces there sufficient to secure the capture of that garrison, and there would be no possibility of their reenforcing it if our Navy was successful over the Spanish fleet. The destruction of Cervera's fleet settled that question and left their garrisons in a position so that they could neither withdraw from Cuba or Porto Rico or reenforce Porto Rico from Cuba. The expedition which was ordered to be prepared to capture that place was in process of preparation during the time the first expedition went to Santiago. The plan was to start another expedition immediately to join that at Santiago, and, if assistance was required there, to use that force to accomplish the object at Santiago, and then to take all that were required from the troops that went to Santiago to capture Porto Rico. The yellow fever breaking out in the command at Santiago made it practically impossible to take any force from Santiago. I watched the reports very carefully every day; in fact, before I left Washington information had been received that it had appeared among the troops. I think the major of a Michigan regiment was the first affected. By the time I got there there had been a number of cases, first five one day, fifty the next, something over one hundred the next, running along up until about four hundred and fifty cases were reported, and I watched the reports of the different regiments to see which regiments were affected the least. There were two regiments—one was the Eighth Ohio and the other the Twenty-fourth United States Infantry—and the next day one case was reported in one regiment and eight in the other. Hence, I deemed it inadvisable to take any portion of that command to Porto Rico. The portion of the troops that had not disembarked, numbering 3,314 men, I decided to take immediately to Porto Rico, and on obtaining a convoy from the Navy we sailed. I was hoping that we would receive from the North a sufficient number of tugs and lighters to enable the men to disembark, but those did not reach us; and, also, I hoped to get some from those that were then in the harbor at Santiago. Those did not arrive. We sailed slowly from Guantanamo up through the Windward Passage, and when turning to the east from that point; and not having any means of disembarkation except the boats on the transports and the boats that the Navy had, the question became quite a serious one; and as all the communications by cable had passed over the French line, I feared that the fact would be given away to the Spanish authorities or

might have been given out to our own papers—as it was—and the question then came up as to the advisability of changing our course from what was originally intended. The original intention was to land at the northeast corner of the island, near a place called Point Fajardo, and then move toward San Juan, but as our facilities for disembarkation were most limited, and that being an open roadstead, I decided to change the course and land at the harbor of Guanica, here [pointing to map]. The original plan was to land here, at Point Fajardo [pointing to map]. If I did not succeed in landing there, I intended to land on Crab Island, near by, and make it a rendezvous; but being satisfied that the Spaniards would know of my intention before I reached there and move troops from San Juan and from those garrisons down here at Humacao and intrench across this point [pointing to map], as they did, I decided to land at another part of the island where I was least expected, and I therefore went into this small harbor, Guanica, where there was deep water near the shore, and perfectly still water, so that I had no trouble in placing the transports close to the shore, and putting out a pontoon bridge from some of the transports to the shore, and men and animals were moved out on this bridge to the shore. Then the troops commenced moving to the east and north from that port. I landed there with less than 3,300 fighting men, and there were at the time I landed something like 17,000 Spanish troops.

Q. When and to what extent were your forces in Porto Rico first increased?

A. Within three days Major-General Wilson arrived. While this movement was in operation troops were telegraphed to move from Charleston, from Newport News, and from Tampa, and they were to come to Point Fajardo, on the northeast corner of Porto Rico; but I had arranged with the Navy to send out small vessels to intercept them and turn them to the south of the island. After three or four days they commenced to arrive with reinforcements. General Wilson arrived, but his troops did not disembark at Guanica. They disembarked at Ponce. General Brooke arrived later and moved farther east and disembarked at Arroyo and then moved to Guayama.

Q. What was the force under your command after General Brooke's corps arrived?

A. I think, approximately, 10,000 men. Later other troops arrived, making the force 14,365 officers and men on August 13, the date of the cessation of hostilities.

Q. What military dispositions had been made looking to the subjugation of the island or the capture of the Spanish forces up to the time of the signing of the protocol?

A. I can tell you that better in a moment. As soon as that map arrives, you will see just the disposition of the troops.

Q. Well, in the meantime, we will pursue another subject to some extent. You landed at Santiago, General, as we understand it?

A. Yes, sir.

Q. At what time?

A. I arrived there on the 11th of July. I went up to General Shafter's headquarters on the 12th.

Q. Did you have any opportunity of seeing the troops in the several positions which they occupied at that time?

A. Yes, sir; I went from near the right to the left of the line. I saw the entire line.

Q. How were they supplied as to food and raiment, ammunition, shelter, etc.?

A. Well, they had, as far as shelter is concerned, very little. They had shelter tents—perhaps one piece to a man. As far as food is concerned, they had meat, hard crackers, and coffee, principally. They had some vegetables. They had a very limited supply of tentage and food; that is, the minimum allowance of both.

Q. What were the character of and facilities for transportation from the coast to the positions occupied by the troops?

A. From the coast—by wagons and pack trains.

Q. What was the condition of the roads?

A. A poor road—bad roads. Not as bad as I have seen, and not as good as you would like.

Q. Was the amount of transportation available equal to the demands made upon it for the supply of the troops—the proper supply of them?

A. No, sir.

Q. Was that occasioned by the lack of the transportation itself, or the inability to handle it on the road?

A. Well, I can only tell you what the reports were as made to me in regard to that.

Q. Yes; you had no personal observation especially in regard to them?

A. I saw the condition of affairs, and then inquired as to the condition, or causes of the conditions. I received reports from the officers. General Shafter reported to me that he had started to disembark at Daiquiri, and directed General Lawton to move in advance on Siboney, and that his orders were that he should remain there and put his division in position until troops, transportation, and supplies could be landed, and give his men and animals two or three days' rest to straighten out, as is always done in an expedition moving against an enemy. General Lawton reported to me that while he was doing this the commands of General Wheeler and General Young and Colonel Wood moved through his camp. General Lawton reported that he had received information from General Chaffee that there was a scheme on hand to leave him in the lurch and have a fight; and the next morning he heard firing at some distance away, supposing that it was some of his advanced guard of Cubans having a fight with the Spaniards. But he learned that these men had gone out regardless of orders which had been received for them to remain in this place until they were prepared to go—this in direct violation of former orders—and very soon a message came down urging that reinforcements be sent there. General Lawton then moved his two brigades forward, Chaffee's brigade on one road and Miles's brigade on the other. The brigades moved out, and their movement was discovered by the Spaniards, who withdrew. But that precipitated the movement and drew the troops five or six miles into the interior without being properly supplied. It took them away from their steamers, where they should have been unloading their stores, transportation, and medical supplies, and took them into the interior before they were properly prepared; and the information I received was that from that time they never did get their stores all off the steamers that they should have had before they started; and later, as fast as the supplies of food could be unloaded from the steamers, they were sent up, but the transportation then afforded only just facilities enough to keep them supplied with meat, bread, and coffee. The order, had it been obeyed and not been disregarded, would have enabled them to unload stores properly and load their wagons, and the men could have probably carried three days' rations and moved into the enemy's country better equipped, and with all their allowance of tentage, which was an important matter.

Q. The Las Guasimas fight or skirmish, as it is called, was, as we have understood, simply an incident of the campaign, and not a part of the campaign. General Young wanted to get good ground for a camp, and asked General Wheeler if he might just brush away those few Spaniards there?

A. There was most excellent high ground within 1,000 yards of Siboney, where he could have camped a division if he had wanted; but the place where the fight occurred was nothing like as good a ground as the place where he marched over, and it was done in direct violation of orders, as I understand it.

Q. Had the wounded been taken away from Siboney at the time you landed there, General?

A. They were being brought away; some had been taken away, I think—I am not quite sure—but they were bringing in the sick and wounded from the front, most of them sick. I think the wounded had been all moved before that time.

Q. Did you make any personal observation as to the condition of the hospital, and the care which was taken of the sick at that time?

A. Yes, sir; I went through the camps and gave directions. The surgeons reported that they were short of medical attendants, and I ordered the Twenty-fourth Infantry to report to the hospital to attend the sick, cook for the patients, and do all the work that was required.

Q. What was the condition of the medical corps—of the health of the surgeons serving with the troops at that time—as to their health? Had any of them succumbed to disease by that time, or did you find enough to care for the sick as they came in?

A. They complained that they were short of help, and some that I saw seemed to be worn out. If they had not been obliged to exert extraordinary effort, or if there had been other men to relieve them, they would have gone on the sick report themselves. They looked exhausted.

Q. Were the medical supplies at that time sufficient for the needs of the command?

A. Possibly the dispatch of General Shafter of August 4 will give you a better idea of that. This is a dispatch of August 4, addressed to the Adjutant-General, reading as follows:

“One division of this army, General Kent’s, has not had a particle of medicine for eleven days, except quinine, epsom salts, and castor oil, and this chronic condition of scarcity of medicines has been a constant complaint. Whoever regulates the supply of medicines does not seem to understand that nearly every man in the army—20,000—requires more or less medicine every day. Why can not enough be purchased and sent here? The few little supplies on the *Olivette* are being counted, put in piles, and issued to-day to the various division surgeons, and no one gets anywhere near what he needs. Dr. Wood, surgeon First Division, tells me that four men in the Thirty-third Michigan died in the past week for lack of medicines.

“SHAFTER, Major-General.”

Q. From what you observed, and from what you learned while there, was the lack of medical supplies a constant factor in the solution of the problem that they had to encounter down there; was there at any time a sufficient supply?

A. Of medical material?

Q. Yes, sir.

A. I think not.

Q. What was the condition of the hospital accommodations at Siboney as you saw them; what was the condition of the hospital camps generally?

A. They were very poor; just as good temporary camps as you could make in a field or wooded country; wet grass and muddy, damp ground.

Q. Had they tents?

A. They had some tents; yes, sir.

Q. Were any of the sick men exposed to the weather, or did they have covered tents—tent flies and improvised shelter of that kind?

A. Some of them were exposed to the weather in being sent down from the front—they were sent down in open army wagons. I remember seeing one train come in—most of the wagons were sent up with supplies, then the sick were loaded into those wagons—and I remember seeing one train with the sick without even coverings over the wagons in a drenching rain. I sent my aid-de-camp for-

ward to find the surgeon, and to assist and hurry in any accommodations that could possibly be used to get these men under shelter, as they were then out in the open wagons in a drenching rain and sick with fever.

Q. Did you take any measures, General, while there, either directly or by communication with Washington, to correct the trouble?

A. Yes, sir. One of the first telegrams that I sent from there was to have a corps of laborers sent there for the purpose of building better facilities for disembarking supplies and getting the sick on to the transports—possibly I can find it. On the 12th of July I telegraphed to the Secretary of War that “a well-equipped corps of wharf and pier builders and dock men and appliances are needed as soon as they can be shipped from New York. I have never known heavier rains.” That was sent on the 12th of July, just the day I went ashore.

Q. That was with a view of improving the facilities?

A. Yes, sir; for getting the supplies off the transports to the shore and getting the sick men from the shore on to the hospital ships; and also for any service that might be required of them in the rear of the army—repairing roads, building bridges over the streams between the base and the troops. I also ordered the houses burned that the men were accustomed to get into and get yellow fever. I ordered them burned, and, as I say, I also ordered a regiment of troops from the front back to the base for the purpose of aiding and assisting the surgeons in the care of the sick.

General DODGE. The map [referring to map sent for by General Miles] has come in.

Q. Before we leave this question, General, Governor Woodbury wishes to ask you a question in regard to Santiago.

By Governor WOODBURY:

Q. Will you kindly tell me, General, whether or not the transportation that was with that expedition was used for taking supplies to the front to any others than the army—to any other persons than those who composed the army of the Fifth Corps?

A. Yes, sir; it was reported to me—I did not go over the camp—it was reported to me that there were some 15,000 refugees from the city of Santiago and about 5,000 Cuban troops.

Q. So that the transportation was used for really more than double the number that General Shafter had in his army?

A. Yes, sir.

Q. Do you know whether or not that was unexpected, that he was to furnish transportation for that number, or not?

A. Well, it was not expected, because I had cautioned him before he left Tampa to keep his men out of buildings. It was perfectly well known that these places were infested with yellow fever, and that many of the Spanish troops stationed in those houses lost their lives. I cautioned him to keep his men out of buildings of any character, and also about keeping any of the natives from coming into his camp, so that it was not expected that he would feed the people at Santiago.

Q. Please state whether or not, if he had not fed these people, whether his own army would have been better supplied.

A. Certainly.

Q. Then kindly tell me, General, to what do you attribute the continued shortness of the medical supplies—whether there was a greater tax made upon the medical department than could have reasonably been expected when it left Tampa, or for what other reason?

A. You can draw your own conclusions; that is simply an opinion. I have simply given you the fact.

Q. That is all you care to say about this?

A. Yes, sir.

By General BEAVER:

Q. Now, General, if you will resume your narrative in regard to your operations in Porto Rico we will go into the matter. Here is the map.

A. This point here, Fajardo [indicating on map], was where the Spaniards expected us to land, and they commenced moving troops to that part of the island and intrenching. They had a garrison here, at Cumacao, and also at Arroyo, and also at San Juan; and while they were doing that we were landing on the southeast coast here—Guanica [indicating on map]—and then commenced to move to Ponce. General Wilson's command moved up by steamer and disembarked here at Ponce. General Garretson had a skirmish near Guanica and an engagement near Yauco, and then moved with General Henry's command to Ponce. That was the principal city in that part of the island. Here [indicating] is a military road running from Ponce to San Juan, built by the Spanish Government at a cost of about \$28,000,000, and it was then expected that we would go on up in that direction to San Juan. The Spaniards thought to stop us here in the mountains, at Coamo and Aibonito. General Wilson moved against them at Coamo, and instead of moving direct he sent a part of his command around the mountains, coming in at the rear of them, and, after an engagement there, captured that garrison. In the meantime General Brooke moved north for the purpose of getting into the rear of the Spaniards at Aibonito. General Schwan was sent around to the west to clear the western portion of the island. He had a sharp engagement at Hormigueros, and then took the town of Mayaguez, a place having a population of 20,000 people. General Schwan then moved north and east, and had another engagement at Las Marias, and was following the Spaniards in retreat when he was stopped by orders suspending hostilities. The plan was for those troops to move around the mountains to the north side of the island. While this was being done, General Roy Stone went over a trail in the mountains, between Adjuntas and Utuado, that the Spaniards did not expect us to use, so that they had not fortified it or even put a guard there. Garretson's brigade was moved over this trail, and the road was repaired as far as possible, so that we had a brigade on the north side of the mountains before the Spaniards knew anything about it. Our troops were moving to Arecibo, and then the plan was to form a junction with General Schwan's brigade, making a strong division under General Henry, and some steamers were kept loaded at Ponce to be unloaded at Arecibo. There is a line of railroad running from Arecibo to San Juan. That would have given us a base at Arecibo, with a railroad to transport stores. While General Wilson was threatening the Spanish troops in the front at Aibonito, he had arranged to move a brigade around through the mountains, coming in their rear; and, also, General Brooke was to move to Cayey, which would have cut the Spaniards' line of retreat from Aibonito to San Juan. That was the position of the troops at the time the order was received suspending hostilities. Four days more would have enabled those troops to move to near San Juan, and we would either have captured or destroyed the Spanish troops in the mountains.

Q. You had practically turned both their flanks?

A. Both flanks; yes, sir.

Q. It is a very rough road, is it?

A. It is a very mountainous country, but nothing more than the troops had to pass over in the Rocky Mountains in the United States?

By Colonel DENBY:

Q. How many troops did the Spaniards have?

A. They had 17,000 men when we landed there; but there was a sentiment opposed to the Spanish Government in the southwest part of the island, and I issued a proclamation that raised a revolution among them there and caused many of the volunteers to abandon their service and return to their homes, and it

disheartened the regular troops. There were about 9,000 volunteers and some 8,000 regulars.

By General BEAVER:

Q. When did you leave Porto Rico, General Miles?

A. On the 1st of September. Hostilities were suspended on the 13th of August. We were there on the island only twenty days before hostilities were suspended.

By Governor WOODBURY:

Q. During the time that you were upon the island did you consider you had an insufficient force for the subjugation of the island?

A. No, sir. There were about 6,000 of our troops under fire; that is, in all the different engagements. There were six different engagements, and they were successful in every one. Then other troops were sent. Before we left the total number of troops that were sent amounted to 16,973 officers and men, and I telegraphed requesting that no more troops be sent.

Q. General, was that telegram in response to an inquiry if you desired more troops?

A. No, sir.

By Colonel SEXTON:

Q. Were there any arrangements to send more?

A. I only know by what I saw in the papers that troops were being sent, and I telegraphed requesting that no more be sent, as I had all I required; in fact, that was after the affair was over. I commenced to move back the troops very soon.

Q. Your army was abundantly supplied with commissary and quartermaster stores, was it, General?

A. They were supplied in a way—not, in my judgment, the best way. The same bad system existed there as at Tampa in sending great quantities of stores. In Tampa, for instance, the supplies were sent in cars without invoices or bills of lading, and it was impossible for the officers to know what was in the cars or where the supplies were. At Porto Rico the same evil existed. I had previously requested that complete rations be sent instead of sending them in bulk.

This is an extract from a telegram that I sent the Secretary of War from Guantanamo on July 21:

[Cablegram.]

“ON BOARD U. S. S. YALE,

“Guantanamo Bay, July 21, 1898.

“SECRETARY OF WAR, Washington, D. C.:

* * * * *

“Would like the organizations sent as nearly complete as possible—that is, the transportation belonging to the commands, sufficient amount of forage for animals, and complete rations. The latter is very important—to keep complete rations together, rather than shipped in bulk.

* * * * *

“MILES, Major-General Commanding.”

But instead of that the steamers were sent down loaded with various parts of rations, without invoices and without bills of lading, and not a man on the steamer knew what was on the ship. And large quantities of vegetables—for instance, potatoes and onions, and articles of that kind—would be stored down in the hold of the ship, and no one knew until they opened the hatches what was there. Very often the vegetables were spoiled by the heat in the steamers during the voyage, so that they had to be thrown overboard and the troops did not get them. Thirty-six steamers arrived without any one on board having lists of

stores, and the thirty-seventh vessel was the first to arrive upon which the acting assistant quartermaster had an invoice of stores. This vessel left Newport News August 9 and arrived at Ponce, Porto Rico, August 16. Of course, this caused great embarrassment, loss of stores, and deprived the troops of their proper food.

You asked about food. In my judgment that was one of the serious causes of so much sickness and distress on the part of the troops. During the great civil war we used to supply the troops with a certain amount of food, bread, coffee, and articles of that kind, and beef, largely driven on the hoof and slaughtered as it was required by the troops. It was done in that way during the civil war, and it has been done with almost every expedition that has started on the plains during the last thirty years. It requires no transportation to transport meat in that way, and why that was not done during this war is more than I can tell. But it was not done either to the troops in the United States or those in Cuba and Porto Rico. Both of these islands are perhaps as good grass countries as there are in the world, and the finest beef cattle known to exist were found in Cuba before the war, and on the island of Porto Rico. The latter island was covered with as fine cattle as I have seen anywhere, and on the day after reaching there—July 26—I reported to the Secretary of War that an abundance of cattle could be procured, and requested that ample commissary funds be furnished by first steamer. Seven days later I telegraphed requesting that no more fresh beef be sent, as there was an abundance of beef cattle in the country.

Q. Was not the beef sent in refrigerator cars from the United States in better condition than it would have been by sending it on the hoof?

A. No, sir. Cattle are sent across the Atlantic in cattle ships by the thousands and tens of thousands, and the Spanish army was supplied largely with beef sent from New Orleans; and the cattle country of Texas would furnish all the beef that was required for any army in Cuba, and once across the water at Cuba or Porto Rico they could be turned out on as fine a grazing country as there is anywhere. But as far as Porto Rico is concerned there was no necessity for sending beef there, as there were plenty of cattle there. A telegram was sent from Ponce on the 2d of August requesting that no more fresh beef be sent, as it could not be used more than a day from the coast. The troops were moved in some instances 10, in one instance 80 or 90 miles away from their base, and beef sent to the harbor of Ponce when they were two or three days out from the base would be utterly worthless; and besides that, in my judgment, there is some serious defect in that refrigerator beef, and also the canned beef that was furnished. There was sent to Porto Rico 337 tons of what is known as, or called, refrigerated beef, which you might call embalmed beef, and there was also sent 198,508 pounds of what is known as canned fresh beef, which was condemned, as far as I know, by nearly every officer whose command used it. Here is a brief of reports forwarded by officers whose commands used it:

BRIEF OF REPORTS SUBMITTED TO REGIMENTAL COMMANDERS.

Organizations and commanding officers.	Briefs.
Fourth Infantry, Major Baker	The beef seemed to be of inferior quality and was anything but palatable. Quite a number of men could not and did not eat it.
Sixth Infantry, Lieutenant-Colonel Miner.	The meat was utterly unfit as an article of diet for either sick or well. It had no nutriment in it, and turned the stomachs of men who tried to eat it.
Ninth Infantry, Colonel Powell	The meat produced disordered stomachs, was not nutritious, soon became putrid, and in many of the cans was found in course of putrefaction when opened.
Twelfth Infantry, Major Humphreys.	The meat issued presented such a repulsive appearance that men turned from it in disgust. "Nasty" is the only term that will fitly describe its appearance. Its use produced diarrhea and dysentery.
Thirteenth Infantry, Col. A. T. Smith.	Many complaints were made concerning the meat. It was found very unpalatable, and is unfit for issue to troops.

BRIEF OF REPORTS SUBMITTED TO REGIMENTAL COMMANDERS—continued.

Organizations and commanding officers.	Briefs.
Seventeenth Infantry, Major O'Brien.	The nutritious juices having been cooked out of the meat, it was neither nourishing nor palatable. It was often nauseating and unfit for use. It should no longer be issued.
Second Battalion, Twenty-first Infantry, Capt. J. W. Duncan.	The meat soon spoiled after opening the cans, the men soon tire of it, and it is not a proper food. It is not equal in any way to canned corn beef.
Twenty-second Infantry, Major Van Horne.	The meat issued was nothing more than refuse after various kinds of soups had been extracted from it. Further issues of it should not be made.
Third Cavalry, Major Jackson -----	The meat used for canning was too fat, and as an article of diet soon became nauseating to a large majority of the men. If made of good beef and properly seasoned, it might be satisfactory.
Second Artillery, Colonel Haskin ...	The meat was generally disliked, was soft, watery, and insipid, agreeable to neither eye nor taste. The men could be induced to eat it only when prepared as a stew. The meat was unpalatable, because of the excess of fat in it. Its appearance was black and stringy, and none of the men liked it. When prepared as a stew, it was more palatable. If less fat, and mixed with vegetables, it would deserve further trial.
Fifth Artillery, Lieutenant-Colonel McCrea.	The appearance of the meat was not inviting. The men soon tired of it.
Light Battery K, First Artillery, Captain Best. Sept. 28, 1898. First Cavalry, Brigadier-General Viele. Nov. 30, 1898.	The meat was a miserable apology for food in a hot climate, a slimy-looking mass of beef scraps, unpalatable to the taste, and repulsive to the sight. Competition for the contracts placed the prices so low that only tailings and scraps were used for canning.
Ninth Cavalry -----	Very unsatisfactory; men soon tire of it, and will only eat it when they have nothing else.
Twenty-fourth Infantry, Major Thompson.	After a few days the meat became unpalatable; then men became disgusted with it, and would not eat it.

Now, in regard to what is known as refrigerated beef, which I saw it stated "no man with sense would fail to use"—

By Colonel DENBY:

Q. If a man refused to take that beef, was something else given him?

A. No; they could get no other beef from the stores sent by the Commissary Department.

Q. If they preferred bacon could they get bacon?

A. They could get some bacon, but that is not considered suitable food for the Tropics.

Q. But was it not competent for any officer to whom that meat was issued to have refused to receive it?

A. Yes, sir.

By Captain HOWELL:

Q. I want to ask you, General, is that canned beef part of the army ration?

A. It was made a part of the army ration during this war, to the extent of sending to Porto Rico, as I say, nearly 200,000 pounds of it.

Q. I mean by that, was it fixed by Congress as part of the army ration?

A. No, sir.

Q. Who fixed it, then, as a part of the army ration?

A. You will have to ask someone here in Washington.

Q. I want to know how it became part of the army ration. If he does not know, who should [referring to General Miles]?

A. You had better ask the Secretary of War or the Commissary-General; I think they can tell you. I know it was sent to the Army as food, and the pretense is that it was sent as an experiment; but anyone could have tried it on his own stomach to see what the effect was without sending 200,000 pounds of it. If there had been paymasters down there the men could have bought food, but there were none there, although I requested on July 18 that they be sent there—that was

before I ever started from Guantanamo. Ultimately I gave directions to expend a part of the funds obtained at the custom-house in the purchase of fresh beef.

By Colonel SEXTON:

Q. Was your army adequately supplied with drugs and medical supplies during that campaign; during the time you were at Porto Rico?

A. Fairly well.

By Governor WOODBURY:

Q. Will you kindly state, General Miles, before leaving that question of meat, your reasons—

A. As I say, the island was dotted over with an abundance of cattle, and if you want to ascertain the facts, the beef there cost $6\frac{1}{2}$ cents per pound in our money. $12\frac{1}{2}$ cents in Porto Rican money. Now, if you want to ascertain the cost to the Government of this so-called refrigerator beef—embalmed beef—take the original cost and the cost of transportation from where it was bought, either in Chicago or New York, and to where it was delivered to the troops, and you will probably learn what the transaction cost the Government.

By General BEAVER:

Q. We have testimony as to that.

A. But as I stated, there were sent 337 tons of this so-called refrigerator beef. Here is a report of one of the officers. This medical officer had charge of the *Panama*, which was a ship loaded with sick and convalescents at Ponce and sent North, and this is his report regarding this beef [reading]:

“WASHINGTON, D. C., *September 21, 1898.*

“THE ASSISTANT ADJUTANT-GENERAL,

“*Headquarters of the Army, Washington, D. C.*

“SIR: I have the honor to report, in the interest of the service, that in the several inspections I made in the various camps and troopships at Tampa, Jacksonville, Chickamauga, and Porto Rico that I found the fresh beef to be apparently preserved with secret chemicals, which destroys its natural flavor, and which I also believe to be detrimental to the health of the troops.

“While on duty at Headquarters of the Army at Tampa, at the time of the embarkation of the ‘Shafter expedition,’ Colonel Weston, the efficient chief Commissary, showed me a quarter of beef that had already, as a test, been sixty hours in the sun without being perceptibly tainted, so far as the sense of smell could detect.”

Colonel Weston confirmed this statement in a conversation I had with him a few days ago.

(Continuing reading:) “It is impossible to keep fresh beef so long untainted in the sun in that climate without the use of deleterious preservatives, such as boric acid, salicylic acid, or nitrate potash, injected into it in quantities liable to be hurtful to the health of the consumer.”

In my judgment, I do not know, but I think that to be one of the causes of so large an amount of sickness in our camps. Take, for instance, the most favorably reported—Jacksonville. I sent to ascertain the condition of that camp, and Surgeon Greenleaf reported that out of 17,365 troops at Jacksonville there were 4,041 away from duty on account of sickness; and it has been a mystery to me to ascertain what was the cause of so much sickness during this war, and possibly you have it here—I do not know. There may be other causes, of course.

(Continuing reading:) “At Ponce, Porto Rico, much of the beef I examined arriving on the transports from the United States was also of the same character, being apparently preserved by injected chemicals to aid deficient cold storage.

"Where efficient cold storage is impossible transporting beef alive is the method that should receive the fullest consideration by the Government as being safest for the health of the consumer. When detailed to take charge of the transport *Panama*, for conveying convalescents to the United States, I obtained 2,000 pounds of fresh beef from the commissary at Ponce. It looked well, but had an odor similar to that of a dead human body after being injected with preservatives, and it tasted when first cooked like decomposed boric acid, while after standing a day for further inspection it became so bitter, nauseous, and unpalatable as to be quite impossible for use. I was therefore obliged, owing to its condition, and the just complaints of the sick about it, and the disgustingly sickening odor it emitted when being cooked, and its mawkish, flat taste when served, and the safety of my patients—255 convalescent soldiers on board—to organize a board of survey, condemn and throw 1,500 pounds, all we had, overboard, consequently the convalescents were entirely without much-needed fresh beef, making the duty of bringing the men to the United States in an improved condition a very difficult matter.

"In my inspection of the Fourth United States Volunteer Infantry at Jacksonville recently I observed the same odor and taste upon the fresh beef, but not so marked, and at camp of Sixth United States Volunteer Infantry at Chickamauga I also, at several inspections, observed it markedly. I there inspected a lot of beef just issued to that regiment, and, while it looked well, was of a sickening odor, like a human body dead of disease and injected with preservatives, and when cooked was quite unpalatable, consequently likely to prove an efficient cause of ill health. The men complained of its insipid and mawkish flavor, that high seasoning could not conceal.

"Believing that the Commissary Department has been imposed upon by the misdirected commercial spirit of persons furnishing beef, I respectfully recommend that the matter be investigated by experts making a quantitative and qualitative chemical analysis of the several preservatives suspected to be used by getting samples of beef furnished for export to Cuba and Porto Rico.

"If the question arises that a report should have been made by me earlier, I beg to say that I have endeavored with all my opportunities to first inform myself, by observation, of the conditions above noted sufficiently to warrant my drawing the attention of the Adjutant-General at Headquarters of the Army to the matter.

"Very respectfully,

"W. H. DALY,

"Major and Chief Surgeon, U. S. Volunteers."

Q. Do you know whether or not these reports were furnished to the Commissary-General?

A. There have been a great many reports furnished at different times, but he seemed to be insisting very zealously that this beef should be used, and in his testimony, as I saw it printed in the papers, he made a statement that no one of sense would decline to receive this refrigerated beef instead of beef on the hoof at Porto Rico, which rather reflected upon the commanding general of that expedition.

Q. I did not so understand it at the time, though I can not understand what his intentions were.

By General DODGE:

Q. Do you think that beef that was sent to Porto Rico and Cuba is different from what is used generally in this country?

A. I do not know about that; I think so.

Q. It is pretty generally used all over the United States.

A. The refrigerated beef, if put into proper cold-storage cars, and then taken out at New York and other places over the country, would be comparatively fresh; but when you take it out of the cold-storage cars and put it on a transport without adequate cold storage it would not keep good if shipped to the Tropics.

Q. Your idea, then, is that while it is good in this country, the transportation of it there deteriorates it?

A. I do not think that beef such as was sent to Cuba and Porto Rico would be good in any country, in the stomach of any man.

Q. You prefer, in this country, to use beef on the hoof rather than refrigerated beef?

Colonel SEXTON. He objects to using embalmed beef anywhere.

A. If I was furnished for any expedition in this country, or any other, with such stuff, I would prohibit the men from taking it.

Q. Have not the troops of the United States in this country been furnished with refrigerated beef?

A. They are at some military posts and in cities; but that may be an entirely different affair. I do not know what may have been injected into it.

Q. Has the writer of this letter a knowledge of chemistry?

A. He is a doctor, and quite a scientific doctor.

Q. I want to ask you, was that report made to you, a report to your headquarters, as some of the others made?

A. The report was sent to my headquarters, and the matter has been under investigation for some time.

Q. It has been testified before us—testified by yourself—that the beef looked well.

A. It looked well—as he says (referring to letter) “It looked well,” etc.

Q. General Miles, as I understood the Commissary-General, his objection to the beef on the hoof was that until he could erect an ice plant there it was necessary to send refrigerated beef?

A. Well, I have never known troops moving against a hostile enemy carrying an ice plant and refrigerating plant with them.

Q. Was refrigerated beef sent there after you sent your cablegram of August 2?

A. Yes, sir; it was shipped from this country three days after.

Q. I want to know—did you complain to the Secretary of War about that kind of beef?

A. My telegram requested that no more beef be sent.

Q. It was based on that opinion given you by Dr. Daly?

A. I did not know so much about the character of the beef at that time as I know now, because, as I say, I have been investigating the subject, and the matter will be still further investigated.

Q. What I want to know is, did you notify the Government here—the Secretary of War—that this beef was not necessary?

A. I did not know so much about it then, because this report was made after that.

Q. Oh!

A. I requested that no more beef be sent.

Q. How are the troops in Porto Rico being supplied now—with refrigerated beef?

A. I imagine by contract; by beef purchased there.

Q. Purchased there?

A. It may be that they are still sending the stuff down there, I don't know.

Q. I understood that this officer who made this report did not make any chemical analysis; it was just a mere matter of opinion as to the appearance of the beef and use of it, and so on.

A. He made an expert examination of it as a medical officer who was accustomed to the use of chemicals of the description that are used for embalming bodies.

By Colonel SEXTON:

Q. Did he make any chemical analysis of it, General?

A. The understanding is that this is a secret process of preserving beef.

Q. A Keely motor operation?

A. I do not think that it is a Keely motor; it has a Keely motor effect on the health of the men.

By Governor WOODBURY:

Q. General, I have been quite interested, among other things, in regard to the camps, and I would be very glad to get your valuable opinion as to a few of them. In regard to Chickamauga I would like to ask your opinion—perhaps not looking backward, but from the other end.

A. I recommended that the regular troops be mobilized at Chickamauga, and I also recommended that a portion of the volunteer troops, after the regular troops were ordered away, be sent to Chickamauga, as that was reported to be a healthy country, free from yellow fever. But I never anticipated that they would send 75,000 men there; and in three or four communications I recommended that troops be sent to other places in order to prevent overcrowding. I recommended the Shenandoah Valley, Loudoun Valley, the vicinity of Antietam, and other places. I had nothing whatever to do with the selecting of Camp Alger. There were twelve regiments there before I knew that that had been selected.

Q. Did Major Seyburn, of your staff, go over there and see Camp Alger and recommend it as suitable?

A. Major Seyburn was detailed on duty here at Washington, and temporarily assigned to my headquarters, but he reported direct to the Secretary of War, and his report was made addressed to the Adjutant-General. I do not understand that he ever recommended Camp Alger. He recommended a place near Falls Church. Here is his report dated May 19th (referring to letter); it was furnished to my office on the 23d—a copy of it. That was the first intimation I had had, and before that was received at my headquarters, on the 23d of May, there were no less than twelve regiments there. He recommends the establishing of camps "in the vicinity of Falls Church, Va., Vienna, Va., 4 miles distant, and, as a reserve point, Leesburg, Va., all on the same line of railroad." Camp Alger was not on this line. This is his letter (reading):

"HEADQUARTERS OF THE ARMY,

"Washington, D. C., May 19, 1898.

"The ADJUTANT-GENERAL, U. S. ARMY, Washington, D. C.

"SIR: I have the honor to report, in compliance with your orders of this date, that the points favorably reported upon after my reconnoissance, namely, vicinity of Falls Church, Va., Vienna, Va., 4 miles distant, and as a reserve point, Leesburg, Va., all on same line of railroad, possess all the essential conditions for an excellent camping ground for a large body of troops. My estimate, based not upon personal experience, however, is easily for 40 regiments, including animals, etc., due regard and attention having been paid to the essential requisites of water and fuel supply, transportation facilities, and sanitation.

"It should be borne in mind, however, that no camping arrangements, such as the National Guard is frequently accustomed to, exist. Reasonable time should therefore be given not only to the supply departments to make the necessary preparatory arrangements, but particularly for the officer who is to be placed in command and his staff to familiarize themselves with the topography, location of springs, streams, wells, most favorable camping grounds for organizations, drill grounds, supply distributing points, etc.

"Captain Martin, assistant quartermaster, U. S. Army, in charge of the work, is familiar with the territory referred to, having been over a portion of it with me, and selected such as he deemed at present necessary.

"Necessarily there will be at first inconveniences to the troops in these camps,

but they will soon learn, as did the soldiers of both armies in the civil war, *in the same locality*, how to care for themselves.

"Very respectfully, your obedient servant,

"S. Y. SEYBURN,

"*Captain, Tenth Infantry, on General Miles's Staff.*"

Before that was written there was already one regiment there.

Q. Now, General, are you familiar with Chickamauga Park?

A. To some extent.

Q. Please state whether or not it was a natural place for a camp site, considering that it was owned by the Government, and its healthiness or supposed healthiness—whether or not it was not a natural place to assemble the men.

A. I thought so.

Q. I am not asking this for the purpose of criticising anyone; I am simply asking it, as I said, to get your valuable opinion as to these camps.

A. The ground was suitable, but it was overcrowded. The commanding general should have had discretion to have hired other ground. It would have been better if he had had authority to place his troops anywhere from 50 to 100 miles distant, because it is a healthy country through that region.

By Colonel SEXTON:

Q. He never did occupy all the territory he had there; that is, all of that part?

A. No; but the camp was, as I understand it, overcrowded.

Colonel SEXTON. General Boynton testified, I think, that there was room for 20,000 men more.

General MILES. The following cablegram, which I sent from Porto Rico, indicates the condition of the troops that came from Camp Alger and Chickamauga:

[Cable.]

"HEADQUARTERS OF THE ARMY,

"*Port Ponce, Porto Rico, August 12, 1898.*

"SECRETARY OF WAR, *Washington.*

"Following forwarded for information of Department:

"COLONEL GREENLEAF: I have the honor to report to you results of my investigations concerning origin typhoid fever among our troops in Ponce and its vicinity, as requested in your order recent date. There are at present about 250 cases typhoid fever in army of invasion this point. Careful study of 200 cases of which I have reliable information shows disease in every instance was contracted before leaving United States. By far largest number contracted in Camp George H. Thomas, Chickamauga, Ga. Second and Third regiments Wisconsin Volunteers furnish largest contingent, followed by Sixteenth Pennsylvania and Second Massachusetts. Camp Alger comes next; fewest cases from Tampa. Typhoid fever indigenous in Ponce to some extent throughout entire year, and from the large number of infected cases extra precautions will become necessary to prevent further spread of the disease among our troops. In view of great prevalence of the disease in Camp George H. Thomas, it appears to me Medical Department of the Army should recommend immediate evacuation of the camp.

"N. SENN."

[Indorsement.]

"Sixth Massachusetts and Sixth Illinois from Camp Alger came here on transports with us. About 200 cases, mostly typhoid, developed en route, which I returned on transports. Concurring in Dr. Senn's opinion regarding origin of the disease, I recommend that all fever-infected camps in the United States be abandoned. Every possible precaution has been taken here to prevent its spread.

"GREENLEAF, *Chief Surgeon.*

"MILES."

By Governor WOODBURY:

Q. What do you think of the camp at Jacksonville?

A. That was a very fair ground. Fernandina was a very suitable ground. The advantage of those two places was that the men had a chance to bathe in salt water—the same with Miami. Miami has been a place of refuge for over thirty years, and when the yellow fever threatened the garrison at Key West they would move the troops up to Miami. It is on the coast where they have the advantage of sea bathing, and it is considered a healthy place. There was a large amount of sickness there from typhoid fever, but in some cases it was probably brought there, and in others was caused through using surface water rather than artesian wells, which should have been sunk below the surface water.

Q. What was your judgment, General, in regard to Tampa for the purpose it was used for—the congregation and the shipping of troops?

A. If we were going to send a large force—as it was, there were 70,000 men ordered to Havana—it was the best place that could be found, for this reason: Nine steamers could be loaded at the same time, and it was much nearer Havana than Mobile, New Orleans, Savannah, or other places along the coast.

Q. In your judgment, were the troops left there any too long after the first expedition sailed?

A. It was expected that they would be sent with the second expedition. I intended to have cleared it out entirely of troops. In one of my communications I stated if certain disposition were made it would leave the troops at Miami, Jacksonville, Fernandina, and Chickamauga, and nothing south of that. At that time yellow fever was threatened in the Gulf States—there were several cases of it in Mississippi—and the purpose was to get the troops away from Tampa, and it was expected that they would follow the first expedition immediately.

Q. Is it not a fact, General, that it is much easier to criticise the location of the camps now than it was in the first place?

A. I will say in continuation of that remark that, before starting for Porto Rico, while in Cuba, I requested that the troops at Miami, which were composed of men from Texas, Louisiana, Mississippi, Alabama, Georgia, and Florida, be sent to Porto Rico. The object was to get troops from the South, who were accustomed to a warm climate, and also to take them away from that part of the United States.

Q. What criticism have you to make, General, of any of the camp sites that have been selected during the war with Spain?

A. In my judgment this one over here (Camp Alger) was the most objectionable of any.

Q. On account of what, General, please?

A. On account of its low ground, the known character of the country—it is known to be a country infested with typhoid—and its distance from facilities for bathing. There are three things required to preserve the health of men, and the most important one is cleanliness, and the next, to keep the men dry and properly sheltered, with change of clothing etc., and the third, wholesome food; and if you violate any one of these requirements your men are bound to be sick and debilitated.

Q. Were the grounds at Camp Alger of sufficient extent, in your judgment, for the use of the number of troops that were put there?

A. I think it was a bad location anyway.

Q. But as to the extent; can you say anything about that?

A. I was surprised when I saw it that troops would be located in a place like that.

By General DODGE:

Q. General, you have made, I think, in your report here such recommendations

as your experience in this war has required, in your judgment [referring to report], to Congress, have you not—in your official report?

A. Well, as to many of the evils which existed it is not necessary to correct them by an act of Congress.

Q. I mean for the changes such as are needed—changes by law.

A. No, sir.

Q. You speak of the rations and other matters. Have you any suggestion to make in the change of the rations as it is fixed by law?

A. No, sir; not as it is fixed by law. The experience will be valuable in that respect as to the changes necessary in the components of the ration.

Colonel DENBY. There is a committee appointed by the Army to discuss that.

Q. Have you any other suggestions to make in these matters that you have not made?

A. I do not know that I have any suggestions to present now.

WASHINGTON, D. C., *December 21, 1898.*

TESTIMONY OF MAJ. GEN. WESLEY MERRITT.

Maj. Gen. WESLEY MERRITT then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By General BEAVER:

Q. General, kindly give your name and rank to the stenographer.

A. Wesley Merritt. A great many people insist in giving me more than one Christian name. As I told some one early in life, the name is simply Wesley.

Q. Where have you served during the war with Spain, General?

A. Until about the latter part of May I was on duty on the east coast there, with my headquarters at Governors Island, on the Atlantic coast, commanding the Department of the East.

Q. And subsequent to that time?

A. Subsequent to that time I went to San Francisco. Along the latter part of May, starting from Washington, and remained there about a month getting my command in readiness to embark for the Philippines.

Q. Now, General, will you, in your own way, give us a narrative of the preparation of your command at San Francisco, the cooperation you had from the various departments, the various supply departments of the Government—the Ordnance, Commissary, Quartermaster's, and Medical—in preparing your command, and the transportation of the command, the landing of it at Manila—where we take it for granted you did land—and what occurred in the way of the operation of your troops there?

A. On account of the lack of transports my command had to sail in detachments, and before I got to San Francisco, along about the latter part of May, General Anderson, with about 2,500 men, sailed for Manila. He reached there along about the 1st of July, and so late that I did not hear of his arrival before I sailed, the latter part of June, for Manila. After that the detachments were hurried forward as soon as possible, and my second command sailed about the latter part of June—about the middle of June. The third command, which I accompanied, consisting of about 5,000 men, sailed the latter part of June, on the 27th and 29th of June. The transports that were furnished were inspected by officers of the Quartermaster's Department before they left San Francisco, and every change that was

possible was made in their outfit for the accommodation of the troops. We took great care that they should not be overcrowded, and generally, except to get a few men in in each command that belonged to it, they were not overcrowded, and they reached their destination without serious sickness or annoyance of any kind. The regiments that reported at San Francisco were of various characters. They all contained good material, but quite a number of them were poorly prepared for service—some came there without uniforms, some without arms; but everything was supplied as quickly as possible. The consequence was that those regiments that were best supplied and best prepared for the field were selected to go first. So far as the quartermaster's supplies were concerned, we had everything which in our opinion could be furnished; but the supply was not generous, because it was not possible to make it so with the means at hand, except in some instances. We carried from four to six months' supply; and so it was with the medical supplies. There was no lack of those upon the entire expedition.

Q. How was it as to arms and ammunition; did your command go well armed and provided with ammunition?

A. The arms that the command carried were of the Springfield and Krag-Jorgensen, the Regulars being armed with this latter arm. I was very anxious to take out with me at least one more regiment of Regulars than were supplied, but on account of demands here in the East and after it was found the Fifteenth Infantry could not leave Arizona, I had to content myself with the command that was furnished.

Q. How many of the Regulars went with the several expeditions you had?

A. When they all got there there must have been not less than 2,000 men, possibly a little less.

Q. And when your command was all assembled, what was the number of volunteers?

A. We had about 13,000 volunteers; that is, making up a command of 15,000 when the attack was finally made.

Q. When did the portion of your command with which you went land, General?

A. It landed in the latter part of July—25th.

Q. General, now give us, if you please, the condition of things as you found them when you landed. We haven't got it officially from your mouth where you did land.

A. When I got there I found General Anderson's command, the original command that had sailed, still at Cavite, which is 7 miles by sea and two or three times that distance by land, as you have to go around a peninsula, from Manila. Greene's command of 5,000 men was up at Bakua, on the east coast, and when I inspected his lines I found him occupying lines in the rear of the insurgents, who had taken up every possible position that could be taken around the city of Manila.

Q. Had the insurgents the city thoroughly invested?

A. Yes, sir; and at that time had seized the waterworks, and if it had not been that it was the wet season the Spaniards would have been driven out on account of the want of water. I would say here that there is an excellent system of waterworks, supplied there by some man who left a very generous bequest for that purpose. The water is brought from a distance and supplied to the city. These works, the pumping house and reservoir, the insurgents had taken possession of.

Q. What distance are they from the city?

A. Quite 7 miles, and the Spaniards could not protect it. After getting there and viewing the ground I found the only possible approach with the number of troops I had, when acting in conjunction with the Navy, would be along the beach and the roads contiguous to it; and I gave General Greene orders to occupy the lines that the insurgents had in his front, by diplomacy if he could, but if that was impracticable, then by force. After they had referred the matter to Gen-

eral Aguinaldo he agreed, and they took up position on the Calla Real, which was the principal road to Manila from that front. The beach was the route for the deploying of troops at low tide; there you could get a considerable front and space for deploying. The roads were but highways surrounded on each side by bamboo thickets that were at that season knee-deep with water and stomach-deep in mud, and so it was impossible for troops to approach in any other way than along the beach and these roads. We had no heavy artillery, no siege guns, and we had to act in concert with the navy, and so we had to approach the city and take it in that way. If my force had been larger, my officers whom I sent out to reconnoiter said it was perfectly practicable to come in from the highlands where the water-works were established, but that would have made it necessary to cross the Passig River twice and leave our provisions at the mercy of the insurgents or the Spaniards. It was not until the first week in August that we had enough troops there to make an attack. The Spaniards were known to be from 10,000 to 15,000 strong, but after the first week we commenced negotiations with them. Admiral Dewey and myself signed a joint note telling them to remove their noncombatants, and they replied that they had no place to remove them to, and then we called upon them to surrender, and they wanted to refer the matter to the home Government, which would have taken some time for them to accomplish, and we told them we would not wait for that, and on the 13th of August we made the attack and took the city.

Q. From what quarter?

A. From the very quarter that I anticipated, along the beach. Our men waded up to their stomachs in water which extended out from the enemy's works in baysous.

Q. What was the character of the enemy's works?

A. Right on the seacoast they were very strong and permanent fortifications. Extending from that and reaching around the city they were breast-high embankments, with these blockhouses occasionally, at distances from a mile to a mile and a half apart, and that was the character of the works all around.

Q. Any artillery mounted on the land side?

A. Yes, sir; there were some lighter guns and some mountain guns, but the heavy guns were on the seacoast.

Q. With what was their infantry armed?

A. The Spanish infantry?

Q. Yes, sir.

A. Mauser guns. They surrendered some 22,000 stand of arms and millions of cartridges.

Q. They were well supplied both with arms and ammunition?

A. Yes, sir; perfectly. The only thing they lacked was pluck.

Q. How long did the engagement which resulted in the capture of the city last?

A. Not to exceed two hours, I think.

Q. Beginning what time?

A. Beginning about 10 o'clock.

Q. What was the character of the attack—was it a charge, or what?

A. The navy first opened at considerable distance from their lines, but they were so placed that they enfiladed them, and after firing a certain number of rounds there was an agreement that my signal officer was to keep in advance of the troops, that there should be no firing into them, as the battle ships lay at a considerable distance. Some of the smaller vessels—one particularly that had been converted from a Spanish gunboat—came in very close and did effective service. After certain shelling on the part of the navy—there was some difficulty at first in getting the range, etc., some of their shots falling short—but after the navy's fire got effective, the advance was made by Greene's and MacArthur's brigades. MacArthur was on the road—the Calla Real—and Greene on the beach. My instruc-

tions were—and it was impossible to communicate after the attack commenced—that if either attack should be successful the other party was to file in by the same breach and clear the intrenchments. Greene got in and cleared the intrenchments down to MacArthur's front, and MacArthur got in after a pretty severe struggle. At this stage of the proceedings we had to contend with both Spaniards and insurgents, as the insurgents were anxious to get in when the city was attacked by us. It was my intention to keep them out of the city, as I thought there would be considerable bloodshed and looting.

Q. What were the losses in that battle, General?

A. The published reports are correct in that particular—17 killed, 9 officers and 96 enlisted men wounded—about 120 men and officers killed and wounded.

Q. What was the character of the wounds?

A. The wounds were of a character which impressed everybody with their lightness. We had no amputation at all.

Q. I believe there was only one during the whole war.

A. On the 31st of August I knew of one officer in the regulars who was wounded and did not know it until the next morning. He knew he had been scratched or hurt, but he did not discover that he was hurt or badly wounded until next morning, and then it was a pretty serious wound, but it was with a diminutive bullet.

Q. They make a clean cut?

A. Yes, sir; either through the flesh or bone. It is only where there is fluid matter, as in the head or stomach, that the wound is at all dangerous from those small-caliber arms.

Q. From your experience, General, what do you regard as the most effective weapon, the Springfield, the Kräg-Jorgensen, or the Mauser?

A. If the question is one of disabling and killing men, the Springfield seems the better arm, though either the Mauser or Kräg-Jorgensen will be more effective in hitting a body of men, because the trajectory is flatter.

Q. And the area it will cover will be greater?

A. Yes, sir; what is called in military parlance the "dead space" is less and the "danger space" greater.

By Governor WOODBURY:

Q. The Mauser and Kräg-Jorgensen will temporarily disable more than the Springfield, but will not permanently—or what is it you do mean?

A. My answer to that would be illustrated by the fact that some men may be wounded by the Kräg-Jorgensen or Mauser and not know it until the battle is over, but there is no doubt about the Springfield bullet being more permanent in its injury. A man hit by one will know it; the shock will assure him of that. But in the other case the man might go on fighting all day after being hit, so that could hardly be called disabling him.

Q. Then, on the whole, which would you prefer?

A. I think I would prefer the Springfield, though some of the line officers know more about that than I do.

By General BEAVER:

Q. General, what were the casualties on the enemy's side, do you know?

A. Never able to ascertain. General Cardenas, when he answered our dispatch about taking away the wounded and women and children, said that his number of wounded was constantly increasing, and that he had no place in which to take care of them; but the insurgents had wounded more or less of the Spaniards before our combats came on.

Q. What were captured, both as to men and ammunition?

A. As I stated a while ago, we captured 22,000 stands of arms, all of a modern pattern, and a great many cartridges—millions, they said. The Spaniards reported to be fed about 13,000 to 15,000 troops, 2,000 of these (two regiments) being

natives—Filipinos. They were willing that they should be discharged and turned upon their own resources, but that I objected to, and told them they would be treated as the other Spanish soldiers who fought in the ranks, and that was insisted on and carried out. We finally discovered by actual count that they had 13,000 troops.

Q. As to the larger guns of the artillery, what was captured?

A. Well, I will have to refer to my aid again. [After inquiry the witness continued as follows:] There were 4 large Krupp guns of '86 model, between 9 and 10 inch; then a battery of 6 large mortars, and about as many 8-inch guns, and some converted field guns, and some mountain guns, and several 3-inch guns. They had excellent small ordnance—field ordnance. These larger guns were in permanent emplacements. The field and mountain guns were distributed along their works, and these converted guns were brass guns, made into breechloaders, and were about 6-pounders.

Q. Was the field artillery accompanied by limbers and caissons, to enable you to use them?

A. No, sir; some of the troops that came in later brought their field artillery with them, and they were supplied with animals for draft purposes—these small ponies of the islands.

Q. What was the character of the ammunition they had on hand for their army?

A. Very good.

Q. After your entire command landed there, General, and went into camp, how were they fed—what provision came to you for the proper feeding of them, and how were they supplied with camp equipage and other quartermaster's stores?

A. We had some difficulty in landing the troops on account of the storms—the monsoons—prevailing right up the bay. In the morning it would be very calm, and along about 11 o'clock the wind would come up and the waves would break very high, and the only lighters we had to land our supplies with being these bamboo boats of the navy, which would hold several tons; they would sometimes capsize and get wrecked; but by going below a little we succeeded in getting them in very well, and we hired the native carts to take them up. The quartermaster's supplies, the tentage, and everything of that kind was in good condition. I thought from what I heard of that country that when I went there I could not use a tent at all. I found tents a very valuable acquisition, and it was not two days after a regiment would get in camp before the men would have their tents on piles and beds made as high as this table. The doctors wanted them 6 feet from the ground, but we could not well do that.

Q. The beds were made of bamboo?

A. Yes, sir; and it was a marvel to me how quickly these troops would make themselves comfortable after getting into camp.

Q. General, you spoke of hauling your supplies in native carts. Had the Quartermaster's Department not furnished you with wagons or animals for transportation?

A. It was thought impracticable to take them.

Q. And you went depending upon the country there to secure your transportation from?

A. Yes, sir. We could have taken wagons, but we found nothing capable of hitching into them with our means of attachment. At first we found some difficulty in getting them, but when they found we were paying for them, and with some little threat toward Aguinaldo in regard to it, the supply was abundant.

Q. About what was the height of the average pony there?

A. From 12 to 13 hands; they are very active and strong, but very small.

Q. And the carts, I suppose, are cast on a corresponding scale?

A. Yes, sir.

Q. What is the nature of the climate there, General—the healthfulness of it?

A. Well, my troops were there during the rainy season in camp. While they were on the line they were exposed a great deal to the weather, and the trenches would become filled with water, and there was no sickness at all; and the temperature was not to exceed 85° or 87°, except after the rainy season passed, and then in the sun on hot days it was much warmer.

Q. On the front line did they take their tents or depend upon the shelter tents?

A. No, sir; they lived out there twenty-four hours without any shelter.

Q. And you sent the men forward in reliefs, did you?

A. Yes, sir; twenty-four hours' tour is about all, and a couple of regiments at a time were employed in it.

Q. Were your volunteer troops reasonably efficient at the time you called on them for the attack?

A. They were very efficient and very enthusiastic. They consisted of the very best material in the Northwest. I had a Pennsylvania regiment that was very fine, a Colorado regiment which was superb, and a Minnesota regiment which I knew something about, which could not be excelled except in the matter of knowledge of how to take care of itself. And now, when I mention these regiments particularly, I do not propose to say anything derogatory of the others, because there was a California and an Oregon regiment there which were very good. Then we had a New York contingent, the Astor Battery, which was made up of educated men. That was a splendid battery.

Q. Was the ration furnished you made up of what is known as the ordinary army ration?

A. Yes, sir.

Q. Was it in your judgment all that was necessary in that climate?

A. I heard no complaint of it. The only want that was not filled at once, or not at all perhaps, was milk for fever cases and ice for patients who were sick in the hospital. We soon remedied the ice question, but not the milk.

Q. Was it not possible to secure the milk in that country?

A. No, sir; there is no milk-giving animal that I know of.

Q. Why is that? Can't they raise them?

A. They did have cows there of a small type—I presume they came from Australia or China; but the milk was habitually scarce and the doctors could not get it. These water buffaloes, they may give milk to their young, but they do not produce any for use.

Q. Does your experience lead you to suggest any change in the army ration in the way of making it more palatable or better suited for that climate?

A. I have heard no suggestion, nor does my experience teach me that any is necessary. Of course, after we got there we had an abundance of meat supplied from Australia that Admiral Dewey had ordered for his own command, but which he shared very abundantly with the army.

By General DODGE:

Q. That is the refrigerated meat?

A. Yes, sir.

By General BEAVER:

Q. What are the native fruits, General?

A. It would be difficult for me to name them. They have bananas, and pineapples, and cocoanuts, and then they have a multitude of fruits which are distasteful to me—a sweetish, sickening taste. They have a persimmon, but it is not like what we call a persimmon—

Q. Is it like the Japanese persimmon?

A. Yes, sir; like the Japanese persimmon; it is not like ours.

Q. As to medical supplies and hospital conveniences, were you abundantly supplied?

A. We were well equipped. I heard no complaint at all. After we got into Manila we took possession of the best houses and turned them over to the sick men, for the sick men. There was a new convent there, and they made a fuss about taking it, but I turned that over to the Red Cross Society. They were doing a very good work there.

By Governor WOODBURY:

Q. Is that the Red Cross Society of the United States?

A. Yes, sir. From the time we got to California until we left there, and at Honolulu the same way, the men, women, and children turned out en masse and did everything they could. In fact, they did too much in feeding them with things they should not have had.

By General BEAVER:

Q. General, in any further operations that may be necessary in that region will it be safe for the Army to depend for their land transportation upon such as they can secure in the country, or will it be necessary to supply them from this country?

A. I think it would be better to depend upon that country for the transportation that is necessary; I am not sure our horses will stand it at all. The native horses are fed on salt grass and ground rice, and while it is nutritious it is said to scour imported horses so that they are short-lived.

Q. Did you depend upon that country?

A. Yes, sir; and we got some fair specimens of horses from Australia.

Q. Did you receive what in your judgment was efficient and sufficient cooperation from your superiors in preparing for and conducting the campaign which resulted so satisfactory?

A. The President was specially cordial and considerate, and promised and did everything that was possible, and I do not know that I can make any complaint against any of the officers of the Government, with the exception that I did think I might have had a contingent of regulars as a nucleus, taken perhaps from Tampa, if necessary, rather than keep the entire 25,000 efficient men of the Army down there. But the only satisfaction I got in regard to that was that unless the Fifteenth Infantry could be replaced by something I could furnish, I would have to go with what I had.

Q. You wanted a force to serve as a model, an instructing force?

A. Yes, sir. When I got to San Francisco I turned my staff officers out without exception to go into the camps and live with the troops and instruct the officers first and the men afterwards in all the duties of a military life, and they were thanked on the part of these officers all the way through, and I was, too.

Q. You found the volunteers ready to learn?

A. Very anxious to learn.

Q. And quick to adopt whatever was suggested by more experienced officers?

A. Exactly; and there was no disposition to differ, find fault, or complain on the part of anyone. All they said was that they wanted instruction and were glad to get it.

Q. Did you have any of the officers appointed from civil life that were serving in the several staff departments?

A. Yes, sir; I did.

Q. What was their general character?

A. Very efficient and very anxious to learn, the same as the officers of volunteers; anxious to learn and anxious to work. I could name a number of them. Then I had the advantage of having for colonels of those regiments a number of men who had been educated at West Point, and some of the field officers were men who had served in the old Army, and they had taken their position in the National Guard and afterwards in the volunteers. As I said, I could name some

of them, but it is possible I might omit some name. There were the sons of prominent men and the sons of nonprominent men who came to me.

Q. General, looking back at your campaign, its preparation at San Francisco, the transportation of the command to Manila, the military operations at Manila, do you regard it as successful or otherwise?

A. I regard it as rather successful.

Q. With the experience you gained during the campaign, would your course, either in preparation, transportation, or actual conflict with the enemy, be changed to any extent?

A. I think not, sir. I would say that with my fleet, consisting of about six vessels—transports—the transport I was on started from San Francisco at the time it was rumored that Camara's fleet was starting for Manila through the canal, and then I was anxious to have a convoy. It would have been murder to attempt to fight an enemy with no means to fight.

Q. You had no convoy?

A. No, sir. I hurried my vessel, which was a faster vessel than the others, on to Manila, to find out about the Spaniards. We had no information about the Spaniards until we arrived at Manila. I would of course rather have surrendered one ship with myself on board than to surrender six ships with 5,000 or 6,000 men on board.

Q. It must have been an anxious time?

A. It was an anxious time. I was telegraphed from Washington that in the event of Admiral Dewey being able to send anybody, he would send a convoy to meet me in a certain longitude and latitude which were mentioned; but in the event of Camara's fleet going through the canal to Manila he would have all he wanted to attend to there.

Q. Have you any suggestion as to change of uniform?

A. I think that as far as the troops serving in this country are concerned the regular uniform is best; but out there this khaki uniform is very good, but not attractive looking or smart looking. A little color would add to it; a standing instead of a turn-down collar would improve it and be an advantage. Out there no man wears a collar, but they do button up their coats, and except a woollen shirt they are without a shirt, and they look very respectable when the coat is buttoned, and the standing collar makes it doubly so.

By General DODGE:

Q. What is the uniform of the Spanish troops there?

A. They wear trousers or breeches made of this khaki; and then they had a striped cotton shirt, which was very soldierly looking. I do not know the material, but they must have had enough to last them some time, as they came out looking very smart every morning.

Q. What was the hat?

A. Straw hat. We had a campaign hat which was better than the pith helmet.

By General BEAVER:

Q. What do you say as to cork helmets?

A. It would do very well. I had one and so did one of my staff officers, and he went out in all sorts of weather. It was not a very dressy hat when we got through with it, but it was serviceable.

By General DODGE:

Q. General, in relation to this refrigerated beef that came from Australia; did you have any complaint about that?

A. No, sir; I had it on my mess table. We got it as often as three times a week. Sometimes the sea was so boisterous that we would not send out for it; but the Admiral told me it was there and at my service, and it was sent for whenever it was wanted.

Q. You heard no complaint?

A. No, sir.

Q. You had it at your mess, you said?

A. Yes, sir.

Q. General, from your experience of transportation by sea, what is your opinion as to whether it should be controlled by the Army or do you think it would be better to have troops going a long distance by sea under the command of a naval officer?

A. A naval officer should be the navigator, and an army officer should be there to maintain the discipline. When we first started out we had trouble in making the men keep their places where they lodged clean, but after a couple of days it was all right. The cause of the dirt was that they had a great deal of tropical fruit on board and they would throw the rinds anywhere. These transports furnished nobody to clean the quarters, and the men had to attend to that themselves.

Q. General, we have had considerable complaint from a camp—not Presidio, but the other one there. Where were the troops camped when you arrived in San Francisco?

A. At the fair grounds, at what was afterwards called Camp Merritt.

Q. What was the character of Camp Merritt?

A. It was not a good one, but the best they had at that time. They had no water at Presidio, and the Department had refused to furnish it in years gone by, and I saw no way to ameliorate it. It was a concentrated camp. The sewerage was good, but it had been established before I got there, and there was no other place to go except to the other side.

Q. It was a necessity?

A. Yes, sir; at that time it was.

By Governor WOODBURY:

Q. Do you know whether the medical supplies that you took upon that expedition came from the East or whether they were purchased in San Francisco?

A. I think they came from the East.

Q. What is your judgment, General, as to what would be the healthfulness of troops, natives of this country, sent to the Philippines to remain there a term of years?

A. I can only judge of that from the fact that I have known men there for from four to fifteen years who left and are now very anxious to get back. They are in perfectly good condition physically now, and those out of the country want to get back. I had dozens of applications from people who wanted to go back, and I took a dozen or fifteen with me.

By General McCook:

Q. What route would you recommend for shipment of troops to Manila?

A. If out there in the West, I would go by way of San Francisco; but I think if transportation was furnished by me, I would take them through the Canal.

WASHINGTON, D. C., *December 22, 1898.*

TESTIMONY OF ADJT. GEN. H. C. CORBIN.

Adj. Gen. H. C. CORBIN then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By Colonel DENBY:

Q. General, will you state your name, rank, and what services you were engaged in during the war with Spain?

A. H. C. Corbin, Adjutant-General of the Army.

Q. We received from you, General, a number of reports, from time to time, in answer to all of our questions, but we thought it best to request you to furnish us a little more information—perhaps a little more directly, so to speak—by an oral examination. Can you tell us, General, from memory, when Camp Alger was established?

A. Why, no; I can not. It was some time in the early part of May, I think; the exact date I can not determine.

Q. Do you know what steps were taken to ascertain whether Camp Alger was a suitable place or not?

A. About the time that it was determined to establish a camp in the vicinity of Washington, Captain Seyburn, of General Miles's staff, and, I think, Captain Martin, of the Quartermaster's Department, were sent to examine the ground around and about the city of Washington.

Q. Let me ask you whether Captain Seyburn was sent by General Miles or by the War Department—by the Secretary of War.

A. About that there is no question. I had always supposed he was sent by General Miles.

Q. There seems to be some little question about the fact as to whether or not Captain Seyburn was assigned to General Miles's staff.

A. He was on General Miles's staff.

Q. Go on, General.

A. Whether he went under the verbal instructions of the Secretary of War or the General I am unable to say. The Secretary of War informed me, at the time, that the camp was selected on the report of Captain Seyburn, now colonel, who was, the Secretary said, sent by General Miles to make the selection. Those were the facts; but perhaps in the haste and the great amount of work that was going on at the time—I should say that Captain Seyburn is more competent to settle the controversy than anyone else. General Miles tells me that he loaned Captain Seyburn to the Secretary of War.

Q. Do you know that Captain Seyburn reported against Camp Alger?

A. I do not know it. He told me personally that it was a good campground. I challenge the statement, because I was in a department which would know these things, and I said at the time that the camp could not be good because of the want of room for target practice, and you can not get a target range within the vicinity of Washington; and I talked with Captain Seyburn about it, and he said in the neighborhood of Falls Creek, and from there to Leesburg, there were good camping grounds, and, as he said, he had made personal investigation. That ended the matter as far as I was concerned, as it rested with the Commander of the Army or Secretary of War.

Q. Had the General of the Army anything to do with it officially?

A. I understood that he had.

Q. Had he the right to protest against it if he pleased?

A. Why, he had the right to select the camp as Commander of the Army, with the approval of the Secretary of War, of course.

Q. You are perhaps aware, General, that the Commanding General of the Army has condemned that camp?

A. I can say conscientiously that I have not read the General's evidence before the commission.

Q. In point of fact, was there any protest by the Commanding General made, or anything done by General Miles to prevent the location of that camp?

A. Not to my knowledge.

Q. When was it—I can tell from your report—the camp was discontinued in the latter part of July; what was the reason for the discontinuance of Camp Alger?

A. Well, I don't know as I am able to state the facts, as far as I am concerned; it was discontinued because I received an order from the Secretary of War to discontinue it, but I do not remember that he gave me his reasons.

Q. You had nothing to do, then, with the determining of the question as to the discontinuance or not?

A. Not the slightest.

Q. Simply obeyed orders?

A. The only part that I have played from the beginning to the end has been in carrying out orders. The Secretary of War gave me no reasons for abandoning Camp Alger. It was suggested that raw troops had been there long enough, and it was thought to be well for the health and morale of the troops to go to new camps elsewhere, and by direction of the Secretary of War I convened boards to select camp grounds, who selected Camp Meade, Huntsville, Anniston, Lexington, and Knoxville. All these camps were selected in order to give the troops a change.

Q. Did you personally visit Camp Alger while the troops were there?

A. Yes, but in an absolutely unofficial way. In driving one evening I drove through the camp. I never visited the camp on any other occasion than that.

Q. Do you think you have information enough to give us an opinion as to whether the camp was suitable or not?

A. No; I never had an opportunity to examine that camp or any other.

Q. Governor Woodbury desires me to ask whether there was any urgency on the part of the officers as to removal.

A. No recommendations of that character ever reached the Adjutant-General's Office.

Q. Would complaints of that sort have gone through your office?

A. Unquestionably, if they had followed the regular course.

Q. And no complaints were made by any officer occupying the ground?

A. No, sir; not to my knowledge.

Q. Then the removal of Camp Alger was effected practically by the Secretary of War?

A. Yes, sir.

Q. It was thought best that the troops should be moved?

A. Troops naturally become restless when a long time in one camp, and I think it is generally conceded by military men that frequent changes of camps are desirable.

Q. Give us some of the reasons. I suppose they are quite plain to you, but perhaps not to everybody.

A. In the first place, men get tired staying at the same camp. That was illustrated at the Presidio, which was perhaps the most beautiful camp in the world. And then the continual use of a camp ground for sinks and the offal from the kitchens, and the abuse of the men—with men that will urinate in camps in the night. That was one of the troubles we had to contend with—that they would urinate in their tents down through the cracks of the floors, where they had floors in their tents. An officer told me that the men had cut holes in their tents for the purpose of urinating, and there was always some fellow who was drunk and vomited all over the ground.

Q. And therefore it is better to change?

A. Unquestionably, frequent changes of camp I think almost a necessity. Old troops could stay a long while in camp, but with raw troops frequent changes are desirable.

By Governor WOODBURY:

Q. General Corbin, what do you know in regard to Camp Thomas, at Chickamauga; what was the original intention as to the use of that camp for troops; for how many troops, and how long a stay was contemplated when that camp was established?

A. Why, back several years ago, when the Chickamauga Park Commission selected and purchased the site at Chickamauga Park, it was with the purpose of using it as a large camping ground. It was a reservation that the Government owned and for which the Government had to pay no rent, and it was situated so far south as to avoid the rigor of the northern climate, and it was thought to be sufficiently far north to escape the heat of the southern climate—in other words, it was regarded by all military men as the ideal place for the first camp—a camp of instruction—the water and the location, the character of the soil, etc. I think you will find that in a report made to Congress when Mr. Lamont was Secretary of War.

Q. Well, that, then, having been predetermined, when war was declared your mind was naturally turned toward that camp as a general rendezvous for troops?

A. Yes, sir.

Q. Did you have in mind—or did the Secretary of War—how many troops would be sent there—how many troops would be there at one time; that would have to be governed by the call for troops afterwards?

A. The thought was to make that a general camp—general rendezvous for instruction and equipment.

Q. But you did not have in mind the numbers that might be sent there or remain there at any one time?

A. That would have to be governed by circumstances.

Q. What information reached you from time to time, during the occupancy of that camp, as to the conditions there—the camp, I believe, was established in May?

A. Yes; the latter part of April or the first of May.

Q. Yes.

A. I do not think that I ever heard of any complaints reaching us of the health of the troops in that camp until perhaps in July.

Q. What time in July were these complaints made, and by whom were they made?

A. I can not state from memory. In the reports I have—my recollection is that the first thing that we knew about Camp Thomas, in the nature of complaints, was perhaps through the public press—I think so. The Secretary of War instructed me to inquire of the Commanding General if these reports were founded on fact; and the replies from that time on—we made frequent inquiries—indicated there were typhoid fever cases there; it was not made in one day or one week—it grew just as the fever grew. Then we began calling for reports daily from there and determined that typhoid existed, and for that reason the camp was moved.

Q. The camp was not moved, that is, was not discontinued, until that time?

A. I should say it was in July, but I have not a good memory for dates.

Q. No; it was in August.

A. The latter part of July or the first of August, I should say.

Q. By looking at the records you will find that it was considerably later.

By General DODGE:

Q. The last troops left there the last of August. The first left there in the last of June or the first of July.

A. We were drawing troops from there all the time. You see, many of the troops were under orders, and we contemplated sending them elsewhere to take

active part in the operations in the field. We did not know how many would be needed in Porto Rico. We supposed we would need more than we did.

By Governor WOODBURY:

Q. Was any special complaint made in regard to that camp that there were too many troops there—that there were more than could be accommodated?

A. Not in the nature of complaints. I think General Brooke suggested that all the troops had been sent there that the ground would accommodate, unless we were going to extend towards Rossville, and he was instructed and in the very act of moving one corps when it was drawn for Porto Rico.

Q. What representations were made to you at any time in regard to the water supply there?

A. There was a controversy about the water supply from time to time, and frequent investigations were made, and all of our official reports were to the effect that the quality and quantity of the water supply was that it was all that was desired. I think the only water that was condemned or complained of by General Boynton was water that was sent there by some benevolent society and the analysis showed it to be impure. I think that was water sent by the Red Cross Society, and after it was received at the hospital the analysis showed it to be impure. The analysis of all the water about the camp showed it to be good.

Q. Please state, General Corbin, if you know, whether or not the Commanding General of the Army recommended that General Wilson's division be sent to Fernandina and Miami from Chickamauga on account of the crowded condition of the camp there.

A. I have no recollection of such.

Q. Our information is that there was a recommendation for troops to go to Fernandina.

By Captain HOWELL:

Q. I remember distinctly his recommendation for troops to go to Fernandina and Tampa.

A. That may be; I can not state from memory.

Q. On the 14th of June he recommended that the soldiers at Tampa be sent to Fernandina.

General DODGE. On June 14 recommendation to leave on account of the crowded condition of Chickamauga:

“HEADQUARTERS OF THE ARMY,

“Tampa, Fla., June 14, 1898.

“SECRETARY OF WAR, Washington, D. C.:

“In my judgment, prudence and safety seem to dictate that the opinion of the highest medical military authorities and experience of many years should prevail. It is well known that Jacksonville just at present, although not on the coast, is healthful; so are Tampa and Mobile. Colonel Greenleaf states in his report: “Experience has demonstrated the necessity for camping troops in such places as may be made safe against the introduction of this disease—yellow fever—and I recommend that provision be made as soon as possible for transporting the troops now at Jacksonville, which would be a place of exposure should the disease advance from its present location, to Fernandina, and that other troops be transferred to Miami.” He states his opinion is formed after consultation with yellow-fever experts, including Marine-Hospital Service. It will be an imperative necessity to move those troops at once should yellow fever approach Florida, and it should be commenced now. The troops at this place would have gone with first expedition had there been transportation, and have for days been working to get ready for expedition No. 2. In fact, these and a division at Chickamauga are the only troops ready. Other troops not ready or equipped for immediate field service can be sent to General Lee at Fernandina. I think it is of the highest impor-

tance that the troops be placed in the three healthful camps of instruction—Chickamauga, Fernandina, and Miami—away from infected cities as soon as possible, and the available force immediately equipped for active service. Is there objection to the troops at Mobile going to Mount Vernon?

“MILES, Major-General, Commanding.”

Q. Was that received from the Commanding General of the Army?

A. Yes, sir.

Q. Then he recommended that 5,000 troops be sent from Chickamauga to Miami and that the Third Division of the First Corps be sent to Fernandina, did he, on the 18th of June, in following letter:

“HEADQUARTERS OF THE ARMY,

“Washington, D. C., June 18, 1898.

“The honorable the SECRETARY OF WAR.

“SIR: In order to take timely precaution against the infection of the commands by yellow fever, I desire to submit the following:

“The troops at Jacksonville, Fla., should move to and take station at Fernandina, Fla.

“To relieve the crowded condition at Chickamauga, the Third Division of the First Corps (comprising nine regiments of infantry) and four batteries of light artillery should be ordered to Fernandina.

“The troops at Tampa, including the horses for the cavalry, now with the first expedition, are equipped and ready to move as soon as transportation can be obtained. I therefore recommend that no change be made in that command.

“The troops at Mobile should be moved to Mount Vernon, Ala., where they would be comparatively safe from yellow fever, and as many of them are “immunes” they can be moved to Cuba as soon as equipped.

“There should be 5,000 men sent to Miami, Fla., from Chickamauga, and in the course of two weeks 5,000 additional men can be sent to Miami from the same point.

“That chartered steamers should be sent at once to Port Tampa.

“Very respectfully,

“NELSON A. MILES,

“Major-General, Commanding.”

A. That communication was addressed to the Secretary of War and not addressed to me. That was received, and it did not receive the favorable consideration of the Secretary of War. There were some objections to sending the troops to Miami, just what I don't remember.

Q. Is it not there [pointing to order]?

A. Yes, sir.

Q. Well, on the 14th of June General Miles recommended that the troops that were at Tampa should be distributed to Miami, Fernandina, and Chickamauga?

A. Not to Chickamauga.

Q. Yes, sir; he did; and I may find it [reading recommendation]; and four days later he wanted to send them from Miami to Chickamauga.

A. The only recommendations I have in mind are the ones that received the favorable action of the Secretary of War.

By Governor WOODBURY:

Q. But there were recommendations there that were not approved?

A. Yes, sir.

Q. Please state whether or not on June 14 the Commanding General of the Army did not report that Jacksonville, Tampa, and Mobile were healthfully located?

A. Yes, sir; he did.

Q. Please state whether or not the Commanding General of the Army at any

time reported to your office, or stated in conversation, that he considered Tampa, Miami, Jacksonville, or Fernandina unhealthy camps?

A. I have no recollection of it.

By Captain HOWELL:

Q. Here is the recommendation of Miles, major-general, to the Secretary of War, June 14, 1898: "I think it is of the highest importance that the troops be placed in the three healthful camps of instruction; away from infected cities, as soon as possible, and the available force immediately equipped for active service." Is there any objection to the troops at Mobile?

A. Now, there, on the 14th he requests that the troops be sent to Mount Vernon, and then on the 18th he suggested that the troops at Chickamauga be sent to Miami.

By Governor WOODBURY:

Q. Do you know the reason for his change of opinion?

A. I do not. My recollection is that he was away from the city. I think the recommendations were made from Tampa.

Q. What complaints came to your office in regard to the camps at Tampa, Miami, Jacksonville, and Fernandina, if any?

A. My recollection is, Governor, that there was no complaint that came from any of these camps, excepting, perhaps, from outside sources—from the friends of the men who were there; that is my recollection.

Q. Please state why Tampa was selected for a camp and for what purpose.

A. Tampa was never selected for a camp beyond being used as a point of embarkation of the troops, and the troops left there in camp, after the Santiago expedition got away, were for reenforcements for that expedition and for the expedition to Porto Rico.

Q. To be ready to embark?

A. That was the only purpose; and the moment that the War Department was aware that we would need no further reenforcements, the Secretary of War gave immediate order to abandon the camp.

By Colonel DENBY:

Q. It appears from our records here that Camp Wikoff was selected August 2, and that on August 6 the construction of the camp was begun; August 8 or 9, the horses, mules, and wagons, and troops which were at Tampa began to arrive at Camp Wikoff, as well as troops from other sections of the South, it also appears.

A. Troops from other sections in the South?

Q. Other sections in the South; perhaps that may not be. Am I right, Mr. President, in that?

A. I think not. They went there from Lithia Springs.

Q. From various portions of the South, with the troops from Santiago which were at that time expected—when the order for removal from Tampa to Santiago was issued—commenced to arrive on August 14. The removal of those troops from Tampa, and the removal of troops from other places to Camp Wikoff at that time, has been criticised; will you please state as well as you can, General, the reasons that actuated the Secretary of War to order those troops and material to Camp Wikoff at that time?

A. The troops of which the Governor speaks were not troops in the main interpretation of the term; they were the horse holders that stayed back from the cavalry, and they were recruits who were there expecting to join their regiments in Santiago, and it was thought advisable that those men, being in good health and good spirits, should go to Camp Wikoff in advance of the troops in Santiago in order that they might assist in making the camp ready for the others.

Q. Do you know whether in fact they did render any assistance?

A. Unquestionably; every officer and man. There was a large number of officers that had accumulated, returning from leave of absence, and the idea was to get them with their regiments.

Q. Had you anticipated that the removal of such a large number of horses and wagons and camp equipage would congest the railroad, so that it would interfere with the supply of the troops which were expected from Santiago?

A. I did not anticipate it, and I think, as a matter of fact, it did not interfere with the supply of the troops.

Q. Do you know whether or not the room which was occupied by these men and animals at Camp Wikoff encroached upon room necessary for the proper care of the troops which arrived from Santiago?

A. No, sir. I think I can state unqualifiedly that there was nothing of the kind happened, because General Randolph and a board of officers as early as perhaps in July made an examination of the south end of Long Island, and in their report they stated that there was abundant room and water there for two army corps. Not only that, but the reason that the selection of Camp Wikoff was made was by reason of its easy access by water. There was no limit to the number of ships to land there, and no limit to the quantity of stores that could be taken there by water.

By General DODGE:

Q. How many troops were there moved from these Southern camps to Wikoff?

A. I should think, all told, General Dodge, speaking approximately—I don't think there were over 6,000 men. The First Cavalry, the Rough Riders—I think there were eight troops—I should say about 6,000 or 8,000. They were leading the horses of Shafter's cavalry, the horses that were left behind and the men were left behind to care for them.

Q. But those forces contained very few of the recruits of the troops that were coming from Santiago?

A. I think they did—they had a good many. I think the headquarters of the First United States Volunteer Cavalry remained back there, and the idea of those men coming up there was to take care of the horses, etc.

Q. Do you know whether or not it was thought desirable that these men should join their regiments so that it would be more convenient for paying them?

A. I don't think so. That might have been one of the considerations, but the idea was to get the regiments together, and the main object was to see that the men who were well might be free to aid their comrades.

Q. Please state whether or not there was anything in the contract with the Long Island Railroad, as far as you know, that prevented your sending troops or supplies to or from Camp Wikoff upon any vessel of any size or kind that you could charter?

A. There was not; unqualifiedly, there was no such understanding. The only restriction the Long Island Railroad placed in their contract was one that was desirable from every point of view—that nondescript vessels should not land there with variety shows, etc.

Q. Excursionists?

A. For reasons that are obvious, restriction of this character was put in in order that we might shut off making Camp Wikoff an excursion ground; but for supplies for the troops and all that relating to the Army clauses were put in in order that we might have our own way in regulating those things.

Q. Please state whether or not it was less expensive to the Government to transport the troops by Long Island Railroad than it would have been by steamers, if you know.

A. That I do not know; that would be hard to determine. The Quartermaster made the contract with the Long Island Railroad, and the question would be that

of water transportation, but we used, in many instances, our own transports. For instance, all the troops that came from Santiago came on our own transports; then we utilized many of them afterwards in taking the sick and many of the regiments, as far as we could.

Q. Is there anything further, besides the matters that I have questioned you about the camps, that you can give us any information upon that will be of use to us?

A. I think that I have furnished the commission everything from my office which would be of any interest, and there is so much of it that I can not undertake to point out that which would be of greater use.

Q. Do you know when the first orders went out, and the date it was, to move the troops from Camp Thomas; that is, to distribute the troops from that camp?

A. No; I just remember it was shortly after General Wilson's division of General Brooke's corps left Porto Rico. The exact date I don't remember. The records will show exactly.

Q. Do the telegrams for that order appear in these printed documents we have?

A. Yes, sir. If it appeared in the record it was sent to the commission.

By Captain HOWELL:

Q. Can you furnish this commission the number and times that these troops from the South were ordered to Camp Wikoff? I mean a summary. Can you by referring back to your records ascertain the number and the time the order was given for them to remove?

A. Oh, yes.

Q. I would like you to arrange to furnish us with a list of same, and also the number of horses.

A. I will furnish this list.

Movements of live stock from the Southern points named below to Montauk Point, N. Y.

Organization.	From—	Horses.	Mules.	Total.
First United States Cavalry.....	Tampa, Fla.....	756	286	1,042
Ninth United States Cavalry.....	Port Tampa, Fla.....	773	120	893
Tenth United States Cavalry.....	Lakeland, Fla.....	666	218	884
Second United States Cavalry.....	Fernandina, Fla.....	833	.....	833
Third United States Cavalry.....	do.....	964	.....	964
Sixth United States Cavalry.....	Tampa, Fla.....	838	.....	838
		4,830	624	5,454

By Colonel DENBY:

Q. General, at the time this war broke out the Army consisted of about 28,000 troops, did it not?

A. Hardly so many as that.

Q. Officers and men, I think, according to your report.

A. About that—about 26,000 men and 2,000 officers.

Q. Those were the figures, 2,143 on April 1—2,143 officers and 26,040 enlisted men.

A. When I spoke I thought that the two artillery regiments were organized.

Q. Those troops, where were they, in a general way?

A. Well, they were stationed all over the United States. I can furnish you with a return showing exactly.

Q. I do not care for that. We want a general idea of the conditions of the Army at the time, say on the 1st of April or along there?

A. The First Infantry was stationed in San Francisco; the Second Infantry was

stationed at Omaha; Third at Fort Snelling; Fourth at Chicago (Fort Sheridan); Fifth at Atlanta, Ga.; Sixth at Fort Thomas, Ky.; Seventh at Denver, Colo.; Eighth at Cheyenne; Ninth at Madison Barracks; Tenth in the Indian Territory; Eleventh in Arizona; Twelfth at Fort Sam Houston; Thirteenth with headquarters at Buffalo, N. Y.; Fourteenth at Vancouver; Fifteenth in Arizona; Sixteenth at Fort Sherman, Idaho; Seventeenth at Columbus Barracks; Eighteenth at Fort Bliss, Tex.; Nineteenth in Detroit, Mich.; Twentieth at Fort Crook (Leavenworth); Twenty-first at Plattsburg Barracks; Twenty-second at Fort Keogh, Mont.; Twenty-third at San Antonio; Twenty-fourth at Fort Douglas, Utah, and the Twenty-fifth at Missoula, an adjoining post in Montana. Those were the stations of the infantry regiments. The artillery regiments were stationed on the seacoast—one regiment on the Pacific and the other on the southwestern coast, and some batteries at Fort Riley, and the light batteries were stationed at Chicago, and one at San Antonio, and the cavalry was stationed about on the same lines as the infantry, divided in different parts of the country.

Q. Then the Army was scattered over the United States?

A. Yes, sir.

Q. At what time, General, did you commence to seriously apprehend that there would be hostilities?

A. I hesitate to answer that question, because it was not a matter for me to determine. If the Colonel means to ask me what time we began to assemble the troops in the South—

Q. I intended to follow to that.

A. I never contemplated the matter seriously until it was a fact. It was hoped that hostilities would be averted, although some time in April orders were given to assemble the regiments of the Regular Army.

Q. You say some time in April; war was declared on the 23d.

A. April 15 was the date of the order, and they were assembled at New Orleans and Mobile and Chickamauga. There is this about it, Colonel; it is only fair to the Adjutant-General to add that a great many things are often said to him that would be a question of propriety for him to testify before this commission.

Q. Certainly; we do not ask that; but what I want to know was whether the War Department had at any time prior to the actual time war was declared commenced to make preparations (that is a fact, not an opinion), and then what preparations. Your report here [indicating] is that on April 15 you ordered troops to the field. I wish you would go on and state that in some detail—as to what was actually done by the War Department.

A. These troops were distributed to their several stations in the order mentioned, and were put in thorough field equipment.

Q. Those points were, I believe—

A. New Orleans, Mobile, and Chickamauga.

Q. Chickamauga, New Orleans, Mobile, and Tampa. Well, what was done?

A. The transportation and clothing and arms and equipment were made as perfect as could be.

Q. Had you on hand at that time enough munitions of war and equipment for an army of 25,000 or 26,000 men?

A. Yes, sir.

Q. You had?

A. Yes, sir.

Q. Had all the munitions and everything necessary been kept up regularly, so as to be supplied at a moment's notice?

A. Yes, sir; for an army of that size. The Army on the 10th of April was well equipped.

Q. Well, then, you say about the 15th of April you commenced to order these troops to various places?

A. Yes, sir.

Q. You did that in contemplation of war, although you hoped there would be no war?

A. Just what the Administration had in view when they ordered these regiments it was impossible for me to say.

Q. Not communicated to you?

A. No, sir.

Q. Then you took all possible steps to prepare these regiments for hostilities?

A. Yes, sir.

Q. In all branches?

A. Yes, sir.

Q. You think they were in good condition?

A. Yes, sir.

Q. You think the Regular Army was thoroughly equipped with everything it required during the time of peace?

A. I undertake to say, Colonel Denby, that on that day, the 25th of April, there was never any army better armed, better equipped, better officers, and better men than our Army. I undertake to say that this was the testimony of every citizen, every military attaché, and of everybody, and of all of the men who fought in Santiago. I think they made a history that settles this point.

Q. At what time—on April 23 the President issued a proclamation calling for 100,000 volunteers. Do you remember that?

A. Yes, sir.

Q. Then what did the War Department do?

A. It took all the steps necessary to carry the order into immediate effect. We apportioned the number of troops that were to be furnished by each State, and mustering officers were duly appointed and rendezvous selected, and these officers were mustering in men as fast as they could be examined. I think we were about forty days.

Q. Had you on hand at that time anything over and above what was necessary for the Regular Army?

A. Very little.

Q. Then what steps did you take to procure provisions and munitions of war and clothing? I don't want a detailed statement. I simply want a general.

A. The very moment that these hundred thousand men were called—then subsequently 75,000 were called into the service—the machinery of the Department was put to work to supply the clothing and food and all that was required to supply and equip an army of 175,000 men. Then the Regular Army was increased to 62,000.

Q. How many men, then, General, did the United States have in the field at any one time?

A. They had nearly 275,000—about 274,800—274,740, I think, was the exact number.

Q. And taking off the Regular Army that you had—26,000 men—you had a quarter of a million men to provide for?

A. Yes, sir.

Q. You never had to provide for such a large number before?

A. No, sir; not since the war of '61-65.

Q. And that was a very serious problem, was it not?

A. It was.

Q. Were you able to find clothing, for instance, in this country?

A. No; at the time—the material was not in this country—we found how nearly the law of supply and demand ran hand in hand; the Quartermaster's Department exhausted the supply of tentage in a very few days, and the mills in the country had to go to work to make the tentage and manufacture the necessary

clothing, and much of that was supplied by the industry and extra effort of the American mills.

Q. Can you give us a general idea how long it was after the 23d of April before the War Department had practically supplied these people with uniforms, etc.?

A. I think early in June they were all in uniform. They had been furnished one complete suit of uniform, and by the 1st of July they were all well equipped; that is, practically so.

Q. With regard to the supply of provisions, was there any trouble about that?

A. Never.

Q. General, in that connection, we have had a good deal of talk here by witnesses in regard to the use of refrigerated beef?

A. Yes.

Q. And canned beef?

A. Yes.

Q. You introduced, I understand, for the first time the use of canned beef. I understand that is fresh beef?

A. No.

Q. Had you used it before?

A. Yes, sir; and I believe it has been used by the armies of the whole world.

Q. This canned beef, I understand, is simply boiled beef?

A. Yes, sir.

Q. Now, tell us whether the Regular Army had used that prior to the war?

A. They had.

Q. Extensively?

A. Well, not in a sense extensively. We had used it to the full extent of the field purposes. We had used it on the plains and for scouting parties, and of late years we have had this refrigerated beef in use at some of our posts.

Q. At your posts did you use it?

A. It was always for sale to officers; but I never used it, because fresh beef was better.

Q. Your opinion, then, is that fresh beef was better?

A. Unquestionably.

Q. What about the refrigerated beef, General; I mean that was not in cans, but which was called refrigerated beef in cold storage?

A. That is what we use at the Arlington Hotel; and I believe all of the beef of commerce is refrigerated beef.

By General DODGE:

Q. I am not an expert on these matters. I understand, and I am coming up to the point. You are the Adjutant-General; all complaints go through you, and we know that. I want to know, then, whether prior to the war you had any complaints of this refrigerated beef or canned beef.

A. No.

Q. And you say that it was used originally throughout the Army?

A. Throughout the Army of the United States and throughout the armies of the world. I think Mr. Armour told me—I was investigating it while in Chicago, and the Chicago factories supply beef to all parts of the world.

Colonel SEXTON. We have Mr. Armour's testimony here.

By Colonel DENBY:

Q. Do you know that canned beef is bought for private use in cities?

A. It is for sale all over the Western country. The miners of Arizona and New Mexico and all through that country carry it because it saves transportation.

Q. You say, as I understand it, that the use of this beef was not an experiment; it was used before?

A. Oh, yes; and as I say, it was generally understood by all military men that canned beef must necessarily furnish a large amount of the food required in active military operations.

Q. General, when an army, for instance, is on the island of Porto Rico—I am speaking hypothetically, of course—and the meat that arrives is found to be in a bad condition, whether or not the general commanding the army on this island, more especially if he be the General in command of the Army of the United States, has the right or not to buy beef on the hoof?

A. Unquestionably. It is his duty to provide an army with everything of the best that the country affords.

Q. If he had not the money to do it with, it would be vouchered?

A. It might be done in the name of the United States. Anyone under those circumstances would have abundant authority to supply the necessities of the troops, and the Government would be in honor bound to meet them, and the regulations provide that shall be done.

Q. Leaving that question for a moment, I am requested to ask you whether or not a strong hope that war might be averted was entertained by the War Department, and that such strong hope delayed extensive preparations for an army that would be necessary in case of war? The question is simply whether you were influenced by that hope of war being averted.

Colonel SEXTON. He testified that they had that hope.

A. The moment appropriations were available for making preparations we availed ourselves of it to the fullest extent. That part of it was made very largely by the action of Congress in making the appropriations.

By General DODGE:

Q. You refer to the \$50,000,000 appropriation?

A. To any appropriation. The moment that the appropriations were available they were used to the very limit in making preparations, because then the matter had become serious. Seriously speaking, I do not think that the War Department contemplated a war until it was decided by Congress. War was declared, of course, by Congress, and the appropriations were available. Of course the possibilities were thought of seriously, but there were no active preparations for war until the appropriations were provided and the declaration of war by Congress.

Q. I don't understand that, because you have testified here that this Army was scattered the world over, and that you ordered the Army to concentrate. You might not have bought provisions, you need not have made contracts, but you certainly did these things or you would not have sent the Army to those four points in contemplation.

A. It was to meet the possibility, not the probability.

Q. Then you give us to understand that the War Department did everything it could do with the means at its disposal?

A. To meet the possibility, or even the probabilities.

Q. It did not make contracts because money was not at its disposal?

A. No, sir.

Q. As soon as the war was declared it did do everything that was necessary?

A. I do not believe any body of men worked harder than the men in the War Department to see that the needs of the troops would be met in every particular.

By Colonel DENBY:

Q. I want to ask you some questions, but if you don't think proper to answer, you need not. The first plan, I understand, was to send those troops to Tampa in order to make an invasion of Cuba. Was it not so?

A. Yes.

Q. At that time how many troops had you contemplated, or did the War Department contemplate, to send to Cuba?

A. I have not the slightest idea.

Q. Was it not proposed to send 70,000?

A. That was a matter resting with the General of the Army and the Secretary of War, about which I never received any other orders than those, copies of which have been furnished the commission.

Q. Then you did not personally know or do not personally know whether the plan was to send 70,000 to Cuba or not, beyond what is shown in the records?

A. All of my knowledge is set forth in the records furnished. Very often I would get an order to send troops there and the reason would not be given me.

Q. I would like to say to you, General—I see you are really cautious and reticent—the object that the commission has in mind is not to criticise strategy, but the object is to find out what the plans were, in order to find out whether the War Department acted properly and thoroughly in carrying out those plans. That is the whole of it, and that is the conduct of the War Department during this war. I want to ask you whether the plan was originally for 70,000 men. Is that so?

A. Yes, sir.

Q. Then we understand from your remarks the plan was to send 5,000 troops in order to furnish arms to the Cubans?

A. Yes, sir.

Q. And those 5,000 troops were simply to go there and come back again?

A. Yes, sir.

Q. Then the third plan was to send 25,000 men from Tampa to take Santiago, Mariel, or some other point, the object being to destroy that fleet with the cooperation of the Navy and the Army?

A. Yes, sir.

Q. Now, this last movement of these troops was executed by General Shafter?

A. It was.

Q. Do you know how many troops he took with him?

A. Approximately 17,000.

Q. Now, Shafter, as we understand, was ordered to go there peremptorily with what he had, was he not?

A. Yes.

Q. Now, why was it, General, that that expedition did not take ambulances, medicines in abundance, and everything that an army ought to have in apple-pie shape and condition? That is what I am getting at, the conduct of the war.

A. I understand it was a matter of transports. There were assembled at Tampa all of the boats that could be obtained.

Q. Now, you state that as a fact—all the transports that could be secured?

A. Yes, sir; every one that we could lay hands on. It was another case where the supply was not equal to the demand. We never had moved such a large army before; never had been called upon, and the transportation facilities of the country did not furnish anything better than what we had at Tampa, and be it said, there was no complaint of the ships at the time, of their quality or their accommodation; they were not as suitable, perhaps, as the new transports that we are now getting out for the carrying of troops; they were made for the carrying of passengers and freight, and we had to utilize them to their fullest capacity because we could not get any more than were assembled there. We chartered every ship that we could lay our hands upon, and I am satisfied the Quartermaster's Department practically exhausted transportation of the Atlantic coast from Florida to Portland, Me.

General McCook. You mean all that the owners would let you have—all that you could get, General?

Q. Then if you had had more transports, more troops would have been sent?

A. Yes; we would have sent perhaps five or seven thousand more.

Q. I want to know what the urgency was, if you think proper to state it; there was evidently an urgency to get Shafter over there?

A. Yes.

Q. With all the men he could take?

A. Yes.

Q. Even if he had to leave behind some things?

A. The least that we could afford to take was fixed by Admiral Sampson's telegram saying that the presence of 10,000 men would reduce Santiago, but the Departments were not willing to undertake the work with so small a force if it was possible to get more, and for this reason utilized the transports to the very limit of comfort and health of the men.

Q. And your judgment is that that had to be done as quickly as possible?

A. For a military reason; that I don't care to go into. Time was the essence of the situation, and that expeditionary force we did not expect would settle the war in Cuba.

Q. What I want to draw out of you is simply this: I want to know whether, taking into consideration the urgency, the necessity of immediate movement, the results that were accomplished, whether or not that expedition went provided with everything that human intellect could provide in the time that you had to do it in?

A. I believe it was. We placed the men and the material there, and General Shafter, I think, was given all that the Army required, and General Miles was there to see in person that the expedition was properly provided and properly sent, and I have no doubt that it was.

Q. When you mentioned a minute ago that the result of the expedition ended the war, did you have a communication from General Miles as to his views as to what ought to be done in the Porto Rico campaign?

A. Yes, sir; the General recommended a campaign to Porto Rico, and he was in charge of that campaign.

Q. Do you know anything about the General's dispatch of June 24, 1898—that was prior to the capture of Santiago; I think it is a letter to the Secretary of War—in which he proposed to have the army march clean through Cuba, and take 50,000 prisoners and work them and treat them kindly, etc.

A. Yes, sir; that letter was received, but did not receive the approval of the Secretary of War.

Q. You say the proposition made by General Miles to carry on the campaign in the manner which he indicated in that letter was disproved?

A. It was not approved.

Q. That was prior to the taking of Santiago. Santiago was taken on the 17th of July; this was written on the 24th of June?

A. Yes, sir.

Q. I would ask you whether the plan of campaign that was adopted was recommended by the Commanding General of the Army?

A. Campaign against Santiago?

Q. Yes, the campaign against Santiago. I call your attention to a letter of his of May 27. As to the campaign against Porto Rico, that was approved, was it not?

"HEADQUARTERS OF THE ARMY,

"Washington, D. C., May 27, 1898.

"The honorable the SECRETARY OF WAR.

"SIR: Referring to my letter of yesterday, and to our consultation since, I desire to submit the following:

"As we are now about to inaugurate active military operations in conjunction with the Navy, I think it would be advisable to load the transports at Tampa with a strong force of infantry and artillery, move them to Key West, and thence along the northern coast of Cuba, where they would have the full protection of

Admiral Sampson's fleet until they reached Admiral Schley's fleet at Santiago de Cuba, and then, by a combined effort of the Army and Navy, capture the harbor, garrison, and possibly the Spanish fleet at that point.

"If before reaching Admiral Schley's fleet it shall be found that he has already accomplished the above object, or that the Spanish fleet shall have escaped, I then urge the importance of a combined attack of the Army and Navy upon Porto Rico. We will be able to land a superior force, and I believe that a combined effort will result in capturing the island with its garrison, provided it is done before it can be reenforced from Spain. The distance from Key West to Porto Rico is 1,040 miles, and from Cadiz, Spain, to Porto Rico is about 4,000 miles. The possession of Porto Rico would be of very great advantage to the military, as it would cripple the forces of Spain, giving us several thousand prisoners. It could be well fortified, the harbor mined, and would be a most excellent port for our Navy, which would be speedily relieved from any responsibility in the charge of that port, as we could leave a sufficient garrison to hold it against any force that might be sent against it.

"Then we should commence, in my judgment, a movement toward the west by capturing the ports along the northern coast of Cuba, at the eastern end, supplying the insurgents with abundance of arms and munitions of war, and as speedily as possible land our cavalry and sufficient light artillery to enable them to move from the harbor of Pto de Nuevitas along the line of railroad to Puerto Principe. From that base our cavalry and light artillery, in conjunction with the forces of Lieutenant-General Garcia and General Gomez, should move west to near Santa Clara. These movements, in my judgment, can all be accomplished during the rainy season, through a country comparatively free from yellow fever, well stocked with cattle, and having grass sufficient for our animals. While this is being accomplished our Volunteer Army will be prepared to land in the vicinity of Mariel, Havana, or Matanzas in sufficient force to complete the capture or destruction of the Spanish forces upon the island of Cuba. The advantage of this movement will be that the Army and Navy will act in concert and close unison; that it does not divide our navy, and that it will utilize our most available military force in the best way during the time of the year when military operations are most difficult.

"I believe that the entrance to the port of Cienfuegos can be obstructed or blocked by one or two monitors to better advantage than to send the army there, where it would have to meet a strong garrison, which is already there, and all of the forces that can be quickly sent there by rail directly from Havana and Matanzas.

"If the above plan is approved, troops should be ordered to embark on the transports immediately, and the purpose would be the occupation of Spanish territory: first, by moving our troops as speedily as possible to Santiago de Cuba and Porto Rico, and later to the north coast of Cuba, especially our cavalry; the military occupation to continue until hostilities cease.

"Very respectfully,

"NELSON A. MILES,

"Major-General, Commanding."

A. No, sir; I do not think that the recommendation of May 27 was approved as a whole. The instructions you will find, I think, under date of June 26, following this letter of May 27. The Secretary of War approved so much of the recommendation as is contained in the letter of the Adjutant-General of May 31. He added, 2.30 a. m.: "You are directed to take command of transport." That was the instructions I received from the Secretary, and how much that was based on the General's report I do not know.

By Governor WOODBURY:

Q. Please state whether or not the Commanding General of the Army, after the expeditionary force under General Shafter was embarked and information was

received that some of the Spanish vessels were at Mole St. Nicholas, whether or not he recommended that the expedition be delayed or abandoned for the time being, and that the steamers that had already been loaded with troops and supplies for that expedition be used to carry water, coal and supplies, guns, revolving cannon, mortars, etc.; that they be added to the force of the Navy as per their letter of June 9. [Indicating letter.]

A. Yes, that recommendation was made.

Q. What action was taken upon it?

A. None.

Q. Was any reply made to it?

A. None; I made no reply.

Q. Was there reply made to it?

A. Yes; reply was made by the Secretary of War under the same date.

Q. What was the reply?

A. It was to the effect that there would be no change made; that "number two" would be organized as rapidly as possible, probably to Porto Rico. I would like to call attention to what I have already stated to the commission—the Major-General Commanding the Army telegraphed that there were 25 steamers. He says in that same communication (we have the evidence of the general himself) that the steamers were good ones.

By Colonel DENBY:

Q. Can you suggest now, with the experience you have had, having gone through the affair, anything that might reasonably have been done by the Government to facilitate or assist the operation of General Shafter which was not done?

A. I can not. I should be afraid to see it gone over again for fear that we would not do it so well, with such good results and with so little loss of life and money.

Q. Do you know anything about the supplies of medicines that were ordered by the War Department to accompany the expedition; would that come through you?

A. No, sir; the question of the supplies of medical articles and different officers was left by me to the action of the Surgeon-General, it being felt that it was a matter that only professional men could handle. The question of the appointment of medical officers was left almost wholly to the recommendation of the Surgeon-General. I can say in that connection that there was not a single medical officer appointed who was not recommended by him by reason of his fitness and professional qualifications. The President would not listen under any circumstances to the appointment of medical officers unless they had been recommended by the Surgeon-General. So the whole conduct of the Medical Department was left to the Surgeon-General and he was given every support.

Q. Then your department knows nothing about the question as to whether there was a sufficient supply of medicines or not?

A. I would not like to say that we knew nothing.

Q. I mean outside of the Surgeon-General.

A. No; all of our reports on that subject came to and through the Surgeon-General.

Q. Had you any complaints?

A. I have never seen one outside of the public press.

Q. General, I want to show you a dispatch from General Shafter here, and ask you whether you know anything about it—I presume you do [referring to dispatch]—where he says the supplies he took with him were exhausted. Have you anything to say on the subject?

A. That was from General Shafter. I remember it was after the battle that the supplies they had taken with them had been exhausted; but the hospital ship *Relief* then followed a day or two after with a large quantity of supplies.

Q. That was after the ship arrived?

A. The *Relief* got there on July 6.

Q. The *Relief* had cots, etc., but not sufficient drugs?

A. I can only say in answer to that, that when it was learned that the medical supplies that had been taken with the Army had been exhausted every effort was made to get the medicines sent there as rapidly as possible. The general understanding is that by reason of the high sea and the trouble in landing some of the transports were forced to put to sea before all the medical supplies were discharged. This I understand in a general way, but have never had any specific reports; and they were not finally landed until after the transports had made the second trip from Tampa with supplies for the Army.

Q. I suppose that the primary question would be, if anybody at Santiago made a requisition for medical supplies, and if they made a requisition and did not get them. according to this letter [indicating], dated August 4, whose fault was it?

A. Under the regulations, these requisitions would all go to the Surgeon-General, and he is abundantly able to answer. This is a question of supply, not of administration. I am only able to answer the question of administration.

Q. I simply wanted to know whether this dispatch came through you and whether any action had been taken?

A. It went to the Surgeon-General for his immediate attention and action.

Q. Now, we have had a good deal of testimony here with regard to transports and by whom they should be commanded; have you any suggestions to offer to that question, whether, where an army corps is being moved, the transport should be under the command of the Navy or the Army?

A. I should say under the command of the Army, because if you had it under the command of the Navy you would have a divided authority. Up to this time we never had had any regulations for transport service. We have never had any service at sea since the war with Mexico, but now we have a very fine transport regulation, which is working very well. The *Mobile*, the new ship that made her first trip under the new regulations, General Williston reported, gave very great satisfaction. I think the transport service, under the regulations adopted by the Secretary of War, has been solved to the entire satisfaction of everyone.

By Colonel SEXTON:

Q. In that new regulation you have given a transport to the Commissary Department also?

A. There is a quartermaster and commissary on each transport, and provisions for the cooking for and feeding of the men of the transport.

By General DODGE:

Q. You say there would be a divided authority. Is there not a divided authority on the transports as it is? Is not the captain of the ship responsible for his ship, and then the quartermaster or officer on board?

A. What I meant by that, General, is, if you had a transport service under the Navy Department, the Secretary of the Navy would give orders, and the Secretary of War might give orders that might be conflicting; that is, it would be under two authorities. In one way the transport service should be under one head. When a complaint comes it should go to one head, who would be competent to determine the whole matter, whereas now in that proposition there might be one complaint determined by the Secretary of War and one by the Secretary of the Navy, which I don't think would be well.

Q. Supposing a naval officer is in command of these transports, he is responsible and in command of that ship from the time it sails until it lands, but the captain of one of your transports, to whom is he responsible?

A. The captain is directly responsible to the Secretary of War; that is all you

can do with incompetent navy officers. It is a mere question whether captains of the mercantile marine are less competent than navy officers. As a rule, I think, you will find that the merchant service furnishes equally as competent men, as they are acquainted with several lines of travel; but that is greatly a matter of opinion.

By General McCook:

Q. They are reducing the salaries of those captains to such an extent that after a while you won't get a competent navigator?

A. That is not the fault of the Administration. I think the Secretary of War ordered that the same compensation be given those men that is being given to men of like service in the civil service. They shall be employed on these lines and that the best men shall be employed. That is what we are doing to-day, and I think we are getting the very best, but, understand, in the beginning, we probably did not, because the Quartermaster had to pick up men.

By General DODGE:

Q. One was an emergency and in the other you had plenty of time?

A. Now our transport service is able to meet every expectation.

By Colonel DENBY:

Q. You issued an order in regard to commutation in hospitals?

A. Yes, sir; General Order No. 116.

Q. What was the date of that order?

A. August 10.

Q. We have had some question here as to the proper construction of that order; that is, whether this commutation, this 60 cents a day, is to be paid to men who are on the sick roll in camp in the tents but who are not in the hospital. Has any construction been placed upon that, determining whether men who reported as sick but remained in their tents should receive this 60 cents or not?

A. The intention of the Secretary of War and of the Adjutant-General was that the commutation for rations was for the benefit of all sick men, no matter where they were.

Q. Did you issue orders to that effect?

A. That was the intention of the order. If it does not read so, it was issued with that intention.

Q. It has been construed differently.

A. The Surgeon-General construed that it must be paid to sick persons, no matter where they are, upon the request of the proper medical officer.

Q. There is a difference of opinion between the Subsistence Department and the Medical Department.

A. I know that it was the intention of the Secretary of War, who thought when the Government ration was not suitable for the soldier that he should be given 60 cents a day to supply the proper food.

By General DODGE:

Q. There have been some statements here that that order was delayed; that it did not reach the surgeons in the field. There were some complaints among surgeons that they did not receive it, and that was the reason it was not in operation. Do you know of any reasons why they did not get that order?

A. I do not. That order was issued and published as all others, but why it did not reach them I have never had any evidence. Some medical officers made the excuse that they never received the orders, but the orders were mailed.

By General McCook:

Q. On the date named?

A. Yes, sir; and the only construction I can make of it is that medical officers

did not read their orders carefully. It is a most difficult matter to get many volunteer officers to read their orders. They do not understand, apparently, the importance of an order in a good many instances because it comes in a printed way. Corps and division commanders have complained to me time and again that it was almost useless to send a printed order to a camp, because they would say it was some new order; they were busy with some other things. They did not appreciate its importance. Complaint is made that they did not receive this order, but we find it had been sent. Not only that, but I gave it to the Associated Press, and it must have been noticed. All these important orders were put on the bulletin and printed. The Department gave these orders to the Associated Press in order that the attention of the officers might be drawn to them, and I can not believe that the order was not received. When the complaint was made, I gave instructions and had it reissued, and sent a duplicate to every medical officer.

By Colonel DENBY:

Q. There has been a good deal of talk before us as to consolidating the Quartermaster's and Commissary Departments. Have you anything to offer about that?

General DODGE. Making one supply department and one transportation department.

A. I have thought a good deal about it, but this question is just like a new shingle—two sides to it. That has been a question which has been argued before my day, and long before my day. I heard about it when I first entered the Army; and you will find very able men have different opinions on this point.

Q. We thought we were applying to an able man now.

A. I have never served in the supply department. I can only say this in reply to the criticisms of the general staff of the Army, that we have been criticised from Bunker Hill down to Santiago, but when we get through I find the Americans are pretty well satisfied with the result. Grant and Sheridan could get along with the staff just about as it is now, and they did very good work, too.

By General DODGE:

Q. Statement was made here in relation to making preparations before the declaration of war. I want to ask you whether or not the Departments are governed by this section of the Revised Statutes:

"SEC. 3732. No contract or purchase on behalf of the United States shall be made unless the same is authorized by law or is under an appropriation adequate to its fulfillment, except in the War and Navy Departments for clothing, subsistence, forage, fuel, quarters, or transportation, which, however, shall not exceed the necessities of the current year."

A. Yes, sir.

Q. So that governed your action?

A. I state the Department was controlled by the statute, and could not anticipate hostilities, however probable. We had to wait for the declaration of Congress and until appropriations were made before any active preparation could be made for a Volunteer Army.

Q. I also wish to call your attention to this clause of the Revised Statutes.

A. That is right, and under the law it was absolutely impossible for the War Department to make any preparations for war in any department until Congress had so authorized; about that there can be no question. Of course the troops of the Regular Army were put in the best possible order and placed on the lines afterwards determined for active hostilities.

Q. Do you remember the order issued, Washington, June 22, in relation to the supply of tentage, transportation, and other matters relating to the hospital department?

A. Making regulations for the allowance of the different departments? Yes, sir.

Q. We have testimony here that that order was recommended some time in May—May 20, I think it was—and it was not issued until June 22. Can you offer us reasons why this delay should have taken place?

A. Because it was receiving the consideration of the Department; investigations were being made as to what allowances had been given the Army heretofore. It was a question of administration that involved vast expenditures of public money, and the Secretary of War could not see his way clear to make the regulations until the matter had been thoroughly sifted, by applying to all the departments to which it related. It was in the hands of the Quartermaster-General several days, in the Commissary-General's several days, and it was before the Secretary of War some little time before he could find his way to approve it.

By Governor WOODBURY:

Q. During that time which this order was held in abeyance, please state whether or not there were ample provisions made, so that the Army did not suffer on account of the issuance of this new regulation.

A. The order was cut down, I think, in some instances and gave more in others. It was a new regulation; up to that time the old regulation was in force.

Q. Were the old regulations such, if they had been properly administered or carried out, as would have been sufficient for the welfare of the Army?

A. In the interpretation of our predecessors in the office the old regulations were thought to meet the requirements just as well as this, but this was thought afterwards to be the better and to be a more liberal allowance. I think that it is the largest allowance that has ever been given to the Army. I do not think you, General McCook, had anything like that in General Sherman's orders and General Dodge's orders.

Q. What I want you to answer—give your judgment upon—is whether or not during the time this order was delayed by the consideration of the Secretary the Army suffered?

A. Not the slightest.

By General DODGE:

Q. There was a question of the furnishing of funds to Porto Rico; do you remember a telegraphic dispatch of the commanding general of Porto Rico requesting funds to be sent to purchase supplies in that district, instead of sending them from here?

A. Yes, sir.

Q. Why were they not furnished?

A. Why were they not furnished?

Q. Yes.

A. My understanding is that they were furnished just as rapidly as they could reach there. There was no means of exchange but the Quartermaster-General and the Commissary-General; both reported to the Secretary of War that they sent abundance of funds on the first ship. There is no question about that.

Q. The funds were there?

A. There was a quarter of a million dollars there ready for use to buy anything. The supply officers had abundant means.

Q. Was any response made to that dispatch?

A. On receipt of the dispatch the attention of the Quartermaster and the Commissary Generals was called to the fact, and they reported that there were abundant funds in the hands of the disbursing officers of the several staff departments to meet all the necessities of the situation.

Q. I want to ask you, had the ranking officer at Camp Thomas full authority to move his division or his troops camping there, at any time he saw fit and proper, to a different ground?

A. Yes, sir.

Q. Had he authority to move them to ground outside of that park?

A. Any commanding officer has authority under the regulations.

Q. Did you have any official notice from any of the officers at any time at Camp Thomas that the troops were too crowded there?

A. General, I don't remember whether I received a report to that effect or whether I heard it by common report. Unless I examined the records I would not like to answer that question. I have heard it, but whether it was an official report to the Adjutant-General or by people outside, that in their opinion the camp was too crowded, I would not be able to state from memory.

Q. Now, General, when large movements of troops were to be made, was it the custom at the War Department to assemble the heads of the departments for conference in relation to the movements of the troops, transporting them, supplying them, and giving them instructions?

A. Yes, sir. The moment an order was made for the movement of troops, large or small body, a copy of the order was at once furnished the head of all the supply departments for his information and guidance, and the Secretary of War called us in daily consultation during almost the entire war.

By Colonel SEXTON:

Q. He would send for one head of a department at a time or frequently all together?

A. Frequently all would be there.

Q. So there were frequent conferences with all?

A. Frequently, and a perfect understanding.

By General DODGE:

Q. There is a complaint made here that paymasters were not ordered to Porto Rico when they were asked for by the major-general commanding the troops in Porto Rico. Why were they not ordered upon his request?

A. They were.

Q. Immediately?

A. Immediately.

Q. Where?

A. They were sent by the way of Santiago, and while at Santiago one or two of the paymasters became ill, suspected to be yellow fever, and it was thought prudent to put the ship in quarantine, and these officers were held in quarantine at Santiago, and General Miles thought it better that they should not, by reason of the reported infection of the ship, be allowed to land at Porto Rico. The money itself it was feared had become infected. The funds were there, however, but for the reason stated they were not used.

Q. Did you send other officers?

A. Yes; from New York, as soon as funds and officers could be put in readiness.

Q. What do you mean by that?

A. That the money was brought back to Camp Wikoff and returned to the Assistant Treasurer in New York.

Q. How promptly were the other officers sent?

A. By the first ship which was available.

Q. General, you were in the habit of receiving from these different camps during the organization daily reports by telegraph?

A. Yes, sir.

Q. Showing what they had on hand and the deficiency in supplies and equipment?

A. Yes, sir.

Q. Now, what action was taken on those reports?

A. Copies of those telegrams were at once furnished to the heads of the Departments to which they related in order that they might be informed of how rapidly the supplies were being received and what deficiencies existed. The Surgeon-General's, the Quartermaster-General's, and the Commissary Departments were all advised.

Q. Were any instructions sent with those?

A. In every instance where deficiencies are reported to exist, the Secretary of War would call attention to the fact and direct that they be hurried along. Very often the Secretary would send for the heads of the Departments and read the reports to them, and, be it said, all the deficiencies, where they were reported, were due in most instances to the lack of the existence of those articles; and we had that system of reports adopted, in order to see how fast the supplies were being received. Every day a large number of issues were made—they were telegraphed every night by the corps commanders showing how many articles were received and issued. We not only knew that they had been received, but issued to the men, and reached their destination.

Q. That was in answer to their request?

A. Yes, sir.

Q. We have from both Porto Rico and Santiago a statement in relation to the request for corps of expert bridge and pier builders for the landing of supplies, etc., and also a statement that they did not arrive or were not sent, I don't know which; I think they did not arrive.

A. A corps of bridge builders?

Q. A corps of expert bridge or pier builders to increase the facilities for landing supplies. Then, at Porto Rico request was made that provision should be made for them to reach there for the purpose of landing the expedition that was going to Porto Rico.

A. Yes; an entire regiment of volunteer engineers was sent there.

Q. Was a part of that in the Porto Rico expedition?

A. Yes, sir.

Q. Did it have full supplies?

A. Now, I will not be sure whether any engineers went with the Porto Rico expedition or not. I know that General Stone, of General Miles's staff, went to Charleston for the purpose of employing this class of labor and buying lumber, and that a ship was chartered at Jacksonville—we could not get a ship at Charleston—to send the men and material to Porto Rico, and they were sent.

Q. How long after the request was made?

A. General Stone left here to make the arrangements before General Miles left Tampa. I can not give you the exact date.

Q. Whose orders was he acting upon?

A. General Miles's, Major-General Commanding the Army. And, as I say, this material was purchased and the men assembled at Charleston, and later they were sent to Jacksonville and shipped from there. An engineer regiment, made up of experts, pretty largely from the different engineering establishments in the country, 1,100 strong, sailed from New York on August 6, under the command of Eugene Griffin, a graduate of West Point, and himself an expert and former officer of the Engineer Corps. I doubt very much whether there was any better organization obtainable for that purpose.

Q. In regard to Porto Rico, we had some testimony on that. What was the number of troops that was requested by the commanding officer for that expedition?

A. Originally?

Q. Yes.

A. General, I can not state from memory exactly; I believe 15,000.

Q. I would call your attention to the dispatch of June 4. I think that you will see that it was 15,000 in that expedition and 25,000 in the Santiago expedition.

A. I do not remember the exact numbers, but the record should show exactly. You will find in the instructions of June 26 or 27—of the instructions to the Major-General Commanding the Army—what the force should consist of. That contemplated an expedition of 27,000, but that number did not go.

By General McCook:

Q. Were there more troops sent to Porto Rico than were desired by the commanding general?

A. Possibly a few more. When we were carrying into effect orders for this movement, a telegram was received from the Major-General Commanding the Army that sufficient troops for the work in hand were on the ground. A part of General Grant's brigade was in the act of leaving Newport News when the telegram was received, but the troops were on board the ship and the Secretary of War thought it was as well to have a few more than might be necessary, and let them go. Three remaining regiments of the expedition then at Newport News were sent back to Lexington, Ky.

By General DODGE:

Q. We have asked you a good many questions ourselves in relation to matters which we desired information upon. Have you any suggestions or information yourself to make?

A. It occurs to me that we have covered the ground pretty thoroughly, but I want to say that if there is any further information that we can furnish it will be done on call.

By Colonel DENBY:

Q. What is the duty of an inspector-general? I do not want you to go into details, but in a general way.

A. I should say the duty of an inspector-general is to inspect.

Q. And the duty of his subordinates to do the same?

A. Yes, sir.

Q. Do you mean by inspecting that he goes over the camp and reports everything that is wrong?

A. He should report to the adjutant-general of the command for the information of the general in command.

Q. He don't report to the commanding general?

A. He does.

Q. Through the general commanding to the Adjutant-General of the Army?

A. Yes, sir; when requiring the action of the Secretary of War.

Q. The general commanding, then, sees the report?

A. Yes, sir; in any instance.

Q. Then, if there was anything wrong in regard to the laying out of the camps, whose business would it be to find that out?

A. The officer in command of the camp.

Q. After the camp has been selected, and the inspector-general rides around and sees that the sinks are not in proper place, whose business is it to report such things?

A. It would be one of the duties of the inspector-general to report to his immediate commander.

By Colonel SEXTON:

Q. It is also the duty of the surgeon in charge?

A. It is the duty of anyone to report anything that is wrong.

Q. Is not that one of the specific duties of the chief of brigade or surgeon?

A. Yes, sir; and the duty of the commander. The reports of the inspector-general are submitted to the commander for his information and action.

Q. You have an inspector-general attached to the staff of each general commanding a corps, each brigade, each division, corps, and army commander?

A. Yes, sir.

Q. And his sole business is to go around and inspect and report?

A. Yes, sir.

Q. Well, then, how does it happen, if anything was wrong at Chickamauga, it was not reported by the inspector-general?

A. It may have been.

Q. If it was not reported?

A. By the officers of the Inspector-General's Department?

Q. Yes.

A. I have not seen any reports of the inspector-general at Chickamauga. If they were sent to the corps commander it is presumed that he remedied the errors himself. That would have been his duty and the natural order of things.

Q. If Camp Alger was a bad place, not suitable for troops, was it not the duty of some inspector-general to report?

A. Yes; it would have been one of his duties.

Q. I mean specifically whether it was the duty of the inspector-general who was on duty at Camp Alger; and if he found the place was unsuitable for any reason, was it not his duty to report it?

A. It was his duty to report it to the corps commander, and he to the Secretary of War. The corps commander is responsible for the camp and the condition of his troops, the inspector being a subordinate only.

Q. How was it at Camp Thomas?

A. It was the duty of the highest military authority on the ground to correct all evils.

Q. We have some report here—of course we are trying to clear up everything by you—it is a rather difficult position—I have been occupying a position of that kind—and it appears here from some of the proof that somehow or other the Inspector-General's establishment is not kept up in the manner and form that the Inspector-General's Department is generally kept up in. Have you anything to say about that?

A. I think the suggestion is largely an error. It is not borne out by the facts. Each corps, division, and brigade has an inspector, the majority of whom were officers of volunteer rank, but belonging to the Regular Army. I think of the 22 division inspectors appointed 16 of them were from the regular service and selected solely on their efficiency records.

Q. The Inspector-General himself was given a command in the field?

A. He was made a major-general.

Q. Was his place supplied?

A. Yes, sir; Colonel Burton, the senior officer, took his place in office in Washington.

Q. Did any inefficiency to your knowledge exist in the Inspector-General's Department?

A. No, sir.

Q. You think that the Department discharged its duties well on an average?

A. The officers of the Inspector-General's Department discharged their duties with ability.

By General DODGE:

Q. Where did the reports from these inspectors-general to the corps commanders—where did those reports go to?

A. I suppose they have been detained largely with the records of the corps com-

manders, but all inspection reports reaching the Adjutant-General's Office were submitted to the major-general commanding for his information. Copies were furnished to the department with which fault was found, and then the reports went to the Inspector-General of the Army in every instance.

By Colonel DENBY:

Q. And it is your opinion that they acted upon them in a proper way?

A. Yes, sir; everything that has come to my office has received full consideration.

Q. The Inspector-General was appointed a major-general; and several of the officers of the Department—and on April 24, some time in April, I think, the Inspector-General recommended that all his officers be made general inspectors; was that done?

A. The recommendations for promotion were made, but all of them were not concurred in.

Q. Was the Department in any way crippled by the departure of the inspectors-general to go into the field as brigadier-generals outside of their duties as inspectors-general, or did the work go on just as well?

A. Well, that would be difficult to say. Their places were filled by officers of the regular military establishment, and, so far as I know, everyone performed his duties to the entire satisfaction of the general under whom he served.

By General DODGE:

Q. In the organization of these troops and chief of the different staff departments that were assigned to them, what was the plan? Was it to assign to the commands of each one of the independent commands an officer of the Regular Army, or an educated officer, and was the chief of all the different corps and divisions—was it the intention to assign to them regular educated officers?

A. It was.

Q. Was that done?

A. So far as possible it was the effort of the Department to give each general officer an adjutant and inspector general from the Regular Army, and engineer officers were likewise detailed so far as the numbers of the corps of engineers would admit.

Q. How was it in the supply department?

A. Nearly 400 Regular Army officers were appointed from their efficiency records, and then we had to go outside to avoid taking officers necessary to command the troops. So that a large number of officers in the supply departments were appointed from civil life.

Q. Were any of these men appointed on account of favoritism in the Army?

A. No, sir.

Q. I wish you would tell us about the appointments from civil life, as to their efficiency, how the officers proved to be?

A. They were made largely from officers who had experience in the National Guard and from graduates of the military schools of the country.

Q. And how did it turn out?

A. I think very well; and with perhaps few exceptions, I have heard no complaints. They were not, of course, the experienced staff officers that come from the Regular Army; that was not to be expected.

Q. They manifested a disposition to do their duties—to do their work?

A. With enthusiasm.

Q. Was there any case that called for a court-martial for bad conduct?

A. There was not.

Q. What is the general record of these gentlemen, good or bad?

A. Very good, indeed.

Q. If there had been such reports they would have gone through your Department?

A. In every instance; they could not have gone anywhere else.

Q. Did you assign these officers from civil life to officers of experience?

A. Yes, sir; and we assigned to general officers of volunteers officers of experience. We made the more experienced officers take the appointees from civil life, and to-day some of the very best officers we have in the Army were taken from civil life. The Quartermaster and Commissary Generals both testified to this.

By Colonel DENBY:

Q. Have you had a court-martial during the war on account of the inefficiency or negligence of any officers?

A. There has not been a staff officer dismissed, and I do not remember a case of the trial of one.

By Colonel SEXTON:

Q. None of the appointees from civil life have been dismissed?

A. There has not been a deficiency of one dollar reported on the part of any volunteer staff officer. There has not been a charge of a discrepancy. They were brave in battle, and enthusiastic in the performance of every duty, and I wish to make of record the fact that up to this hour, in the disbursement of many millions of dollars, there has yet to be the first charge of defalcation on the part of any disbursing officer—regular or volunteer.

Q. Do you know of any case in which the letting of a contract had been caused or influenced by any considerations, except those that were just and fair and honorable to the Government?

A. I do not.

Q. Do you know of anybody in the Department who has exercised an undue influence?

A. I don't. I have not heard of any.

By General DODGE:

Q. Have you any suggestions from your experience in this war of any changes that will be of benefit to the service in the future, or have you made them in your testimony before Congress already?

A. I think I have covered the ground thoroughly in my testimony before the House committee. I hope there are many lessons that will be learned from this war. We are still slow, however, in learning.

Q. What is your opinion as to the difference to-day, in the camps, in the men, from their six months' experience?

A. They have made wonderful progress. The testimony of those high in authority who have visited our camps speaks of their fine appearance. We spent a good many thousands of dollars in building a hospital at Augusta, and the President told me he thought he would do a very nice thing to visit the hospital, and when he got there he said there was not a sick soldier—not a man in it.

By Colonel DENBY:

Q. Your idea is that the Government instead of being economical has been rather extravagant?

A. We have been very generous; there is no question about that. I say unhesitatingly that more has been done for the comfort of our soldiers than ever before in the history of wars.

By General DODGE:

Q. Where applications have come, or telegrams or reports, in relation to want of supplies or lack of anything in the Army, that have come to you, have they been promptly acted upon?

A. In every instance; and I want to say this, that since the day war was declared until this hour my office has not been closed, and the heads of departments have been frequently called in the night in order to send telegrams remedying deficiencies. The Quartermaster-General, Commissary-General, and Surgeon-General have been frequently sent for in the night in order to get the supplies off.

Q. General, how do you account for the complaints that have been made?

A. I think they are due largely to a lack of appreciation of the necessary severities of war. I think one of the unfortunate things was a want of the realization of the hardships of war. The young had become thoroughly versed in the poetry of war, which always survives when the cruel facts are forgotten; so that our young men embarked in this war anticipating only the poetry, that rests so largely in fiction, and encountered solid facts and were brought to a full sense of the realization of the sufferings of actual campaigns. It is true, as so many of you can testify, that the most beautiful poems of war are born of the imagination and founded on the severest hardships.

EXHIBIT A.

Number of troops arriving at Montauk Point, N. Y., from points in the United States.

	Officers.	Men.
Four troops, H, F, L, and M, 1st Cavalry, from Lakeland, Fla.	5	337
Detachment 7th Infantry, under command of Captain Coates, from Tampa, Fla.	7	177
Batteries A and B, 1st Artillery, from Key West Barracks, Fla.	8	513
Headquarters and six companies, 2d United States Volunteer Engineers, from Fort Sheridan, Ill.	35	554
F. and S. and Troops E, H, I, K, L, and M, 2d Cavalry, from Fernandina, Fla.	10	480
Troops A, D, L, and M, 3d Cavalry, from Fernandina, Fla.	7	672
Troops F, I, L, and M, 9th Cavalry, from Fort Tampa, Fla.	5	375
Troops I, L, M, and detachment, 6th Cavalry, from Fort Tampa, Fla.	2	213
Troops H, K, L, and M, 10th Cavalry, from Lakeland, Fla.	7	607
Troops C, H, I, and M, 1st United States Volunteer Cavalry, from Tampa, Fla.	11	268
Total	97	4,196

EXHIBIT No. 1.

Report of the condition of the special emergency appropriation for national defense (war) under the War Department.

[Confidential.]

Title of office.	Amounts allotted to Dec. 31.
Office of Secretary of War	\$225,000.00
Ordinance Bureau	9,081,496.86
Engineer Bureau	5,585,000.00
Quartermaster's Bureau	1,989,230.82
Subsistence Bureau	
Medical Bureau	1,520,000.00
Paymaster's Bureau	255,000.00
Chief Signal Officer	238,900.00
Light-House Board	75,000.00
Total	18,969,627.68

Date of appropriation of \$50,000,000 for national defense, March 9, 1898. War declared to exist from April 21, 1898.

WAR DEPARTMENT, January 3, 1899.

Respectfully submitted.

C. B. TANNER, Chief of Division

EXHIBIT No. 2.

No department of the Government shall expend, in any one fiscal year, any sum in excess of appropriations made by Congress for that fiscal year, or involve the Government in any contract for the future payment of money in excess of such appropriations. (Section 3679, Revised Statutes.)

WASHINGTON, D. C., *December 23, 1898.*

TESTIMONY OF MAJ. GEN. OLIVER OTIS HOWARD.

Maj. Gen. OLIVER OTIS HOWARD then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By Colonel DENBY:

Q. Please state your name.

A. I have given it to the stenographer.

Q. And rank?

A. Major-general, United States Army, retired.

Q. And now, General, will you just tell us, in your own way, what part you had in the war, if any? You were not in the service, were you?

A. No, sir, not in the active service.

Q. Well, what part, if any, had you in the war or in connection with matters pertaining thereto?

A. Being a little disappointed that I could not have a command, I—

Q. State whether you applied for one.

A. I did; but the retired officers could not be put on without an act of Congress, as I understood it, so that I could not get any place. I was very anxious to bear a part; but after giving up hopes and being somewhat disappointed, I received a message from D. L. Moody, who was on the international committee of the Young Men's Christian Association, to know if I would go down as a delegate of the Christian Commission—that is a subcommittee of this international committee; it was called after a time "The Army," and next "The Army and Navy Christian Commission," because we operated in both the Army and the Navy. I telegraphed back, "Yes," and started the next day for the camps.

Q. What camps, General?

A. Maj. D. W. Whittle, who was my provost-marshal in the Army of the Tennessee, went with me. We visited first Chickamauga, but when we arrived "Camp Thomas" had been broken up and the regulars were being distributed between Mobile—

Q. Can you give us the date?

A. It was near the 1st of May. I don't remember just the date of my arrival. It was early in May. I went on from Chattanooga, as everything was in confusion, from the moving, simply. There was no sickness then at that point. I went to Atlanta, delaying a short time there, and then to Mobile. I spent two days near Mobile. I first rode to the camp where General Coppinger had his headquarters—it was called Camp Coppinger—in a pine woods about 4½ miles from the city of Mobile. I arrived in the evening. A large assemblage was there to meet Major Whittle and myself. Mr. Hart, who became the chaplain of the Second Alabama afterwards, was presiding. He was a splendid young man, and he introduced us that night, and we spoke to these men and officers of the Army.

A Texas regiment was represented, and one of the Alabama regiments. After the meeting I visited General Coppinger.

Q. What was the subject of your address, General?

A. I followed Major Whittle, who had been commending the Master in his address to the soldiers. The subject I took was, "He died for me," and I told army stories of soldiers and officers who died by my side in the war, some of whom I regarded as having died for me; that is, they received bullets that came very near me. I was enthusiastically received by both officers and men. I went through the camp and had a good opportunity in my visits to look it over. I thought Camp Coppinger a beautiful camp. I was happily disappointed in finding so nice a situation.

Q. General, will you tell us in regard to all the camps you visited—what you noticed about them in regard to the sinks and water and other things pertaining to the camps? It will save questions.

A. I will say, then, that I visited another camp in the vicinity of Mobile, about 4 miles out in another direction, and met the officers and men in a similar way. The Second Alabama was there; only one regiment then. Others had been there, but had gone; I was greatly delighted with the feeling of union—the old hostility was all gone—and with the kindness with which I was received everywhere. I did not inspect thoroughly; it was not my business; but I did not notice anything offensive in either of those camps. I don't remember anything about the sinks there at all, because there was nothing in the atmosphere but what was pure and good except the smoke from camp fires in the woods. At Tampa, where we went next, I stayed about ten days. I stayed at the hotel there, the Tampa Bay Hotel, met the officers there in large numbers, and I went out to what was called the "Moody Tabernacle," on Tampa Heights, and elsewhere; also in another direction to a little chapel that had been put up. I met at Tampa a young gentleman from Alabama—no, North Carolina—by the name of Mahan. We put him in charge of the distributing office, distributing books and booklets and magazines, and other literary matter, such as we furnished to all parts of the encampment. I went also from regiment to regiment, and paid two visits down at Port Tampa, in that vicinity—no, three visits I made there instead of two, one to the artillery. I was invited by the artillery officers to dine—one to Major Hamilton's camp, and another to Col. Evan Miles, so that I had pretty good opportunities of observation. Generally, I thought the camps were in good order. There were some exceptions.

Q. Could you mention the exceptions, General?

A. There was one regiment of colored troops—I don't know the number of it—but in its vicinity was a great quantity of beer. Colonel Kent and myself were together, and he noticed the beer. "These men," he said, "are fine; they are good soldiers; but this beer! this beer troubles me!" The surroundings, the smell of the beer, and the quantity of it were annoying to me. This is the only annoyance I saw in that regimental camp.

Q. There were hucksters' stands or shops?

A. I saw one or two men intoxicated. Yes; there were shops along the road.

Q. Not within the encampments?

A. No, sir; just outside and across the road.

Q. At other places did you see hucksters' shops?

A. I don't know whether this to which I just referred was a canteen or not; but I supposed it was. There were piles of beer, and it could not have been left there otherwise; but the shops you speak of were across the way.

Q. That was at Tampa?

A. That was at Tampa. I knew of some confusion at Tampa when I was there in the arriving of the supplies. I suppose the trouble was occasioned by the rail road officials dumping down their supplies at different places, far apart, and by

the confusion that had arisen by mixing them up. Things intended for Port Tampa stopped somewhere else, and things intended for Tampa went elsewhere.

Q. There was but one railroad?

A. Yes, sir; and it was difficult at such a terminal to have everything in perfect order. There was a good deal of railway confusion at the time, and some officers imputed it to one cause and some to another; but there was nothing more than would naturally arise in bringing so many men together.

Q. How many men were there then?

A. Twenty-seven thousand, I think, there and in that vicinity—Tampa and vicinity. I went next from Tampa to Camp Alger—no, no; I first came back to Chickamauga.

By General WILSON:

Q. Did you go to Jacksonville?

A. Not at this time. On this visit I came back to Chickamauga, touching at Mobile on my way back from Tampa. On this return journey I noticed one thing at Mobile that I did not notice on my way down, and that was a very large cloud of flies—and very bothersome they were, indeed, at headquarters.

By Colonel DENBY:

Q. Can you give us the date, General?

A. That was the last of May. I am sorry I did not bring my book, or I could give you the exact dates. It was the last of May, because the 1st of June I arrived at the North, and spent June going from mass meeting to mass meeting, urging the people to take up the work of our Army and Navy Association. The main object of the association might be illustrated by this visit. At Chickamauga I came first to two regiments, the Fourth Ohio and the Fourth Pennsylvania, side by side, and I had a better opportunity to observe than I had had before. I went through the Fourth Ohio Camp three or four times, in different directions. The encampment was perfectly laid out.

Q. Were there but two regiments there?

A. In that immediate vicinity only two. At that time there were between 30,000 and 40,000 volunteers that had replaced the regulars that I found first at Camp Thomas; they were scattered about over that rolling country under the trees. At this place there was a tent or pavilion of the Young Men's Association of this army commission. It was very large; I call it a pavilion because it was larger than any ordinary tent or any hospital tent, looped up at the sides, and in it were tables and chairs for the men to sit down. They filled the room, reading and writing letters home, and they seemed quite contented in their going backward and forward to their regiments. I went out and watched a parade, first, of the Fourth Pennsylvania, observing the differences between the parade of to-day and the parade of my time at West Point. A young man stood by me explaining the little differences that took place, and I was pleased with everything I saw; with those two regiments, greatly pleased. I went to the sinks, this time of the Fourth Ohio, and they were in order, but they were not far enough, in my judgment, from the camp. If any fault was found by me at Chickamauga, it was the proximity of the sinks to the officers' line of tents.

By General WILSON:

Q. On the flank or in the rear of the kitchens?

A. The Fourth Ohio had them in the rear.

Q. Did you observe any difficulties they had there with the sinks on account of the character of the ground?

A. I was told—I did not examine it—that the sinks were not sunk deep enough; that an underlying ledge prevented it, and I heard General Brooke speak about it himself, and he said they threw dirt every day into the sinks, and when one was rendered unfit for use that another would be dug.

Q. How long did you remain this time at the camps, General?

A. At that time I remained two days.

Q. And from there you went where?

A. From there—I may say before leaving I visited other regiments; I have spoken of only these two. I visited the Vermont regiment twice. We had but one Vermont regiment, and I knew the officers. I went there to see them, and in their immediate vicinity there was a kind of common ground between that and some other regiment—I think they told me the regiment was from Mississippi—and that common ground was used for “rear purposes” by the men—at West Point we should have prevented its use—and that caused an unpleasant smell, and the men hated to drill there on account of so much offal out there. From which regiments the delinquents came I could not say. It showed a little newness to the service to allow anything of that kind in that vicinity. And, I might say it right here, on my next visit, which was about the 4th of July, or the day before the 4th of July, and continued for three days, I had a headquarters, by the kindness of General Brooke, between his tent and the Leiter station, and I had better observation at this time than before. I visited several brigades and divisions—General Wilson’s, General Sanger’s, the Pennsylvania brigade, and the brigade under the Maine general—

Q. Ames?

A. No.

By Colonel DENBY:

Q. Bates?

A. No. I will leave that blank; it will come to me later. I knew him very well. I met the Pennsylvania brigade at the new theater made of rough boards, on a Sunday of that visit, and the place was crowded to overflowing. The President’s proclamation was read, and we had a good many addresses. I made one amongst the others to the soldiers. I was very much pleased with everything I saw and every part of that encampment except the hospitals. I went to two or three hospitals, and the sickness had already set in and was somewhat alarming.

By General WILSON:

Q. About when?

A. The day before the 4th and the day after. I was there three days just at that time.

By Colonel DENBY:

Q. These were the division hospitals you went to?

A. I don’t think there were any other except division hospitals then. I did not ask whether they were division or brigade, but I think they were division hospitals. There were two of our young men who went every day to visit these hospitals and came back and made reports at my headquarters there. Their reports were to the effect of what they had done, what young men they had seen, conversations in going from couch to couch, and there was only one feeling I had that was not favorable, and that was the odor in their vicinity and in the vicinity of some regiments. My attention was called also to that by some friends in Chattanooga, who visited there daily, carrying milk, and I went at once to General Brooke’s headquarters about it. I did not see him, but I saw his chief surgeon.

Q. Can you give his name, General?

A. I can not. Dr. Hoff was there and met me first; but this time he had been succeeded by another surgeon.

By General WILSON:

Q. Was it Dr. Hartsuff?

A. No. I think I would have known him. At any rate, I was told that he was the chief surgeon, and I told him about it, and I told him there was a large quan-

tity of lime in Chattanooga, and that he ought to have it, and he answered me, "Why, General, this morning I distributed 39 barrels of lime," and I said, "All right." I thought that would cure the trouble. The dirt had been thrown in all right, but there was a superabundance of such offal, and there was not sufficient depth to get enough earth to kill the smell, and flies had already become a little offensive. As you would ride along in the vicinity you would meet this offensive odor. I was very much afraid it would increase the sickness at that time. Only once was mention made to me about the water. They had good water at headquarters, but the Vermont regiment when it came in complained, but the colonel said to me, "To-morrow we will have the pipes in, and then we will have good water." That was on my first visit. Nothing was said about the water on my second visit, not to me, and I do not know that the water was bad.

Q. Did you visit there a third time, General?

A. Yes, sir; the visit of July was the third time.

Q. Yes.

A. The first time the regulars were there, and I did not stay; the second time I visited it there was a stay of two days, and the third time I visited it three days, possibly a little more; but I was there three days, and the 4th of July was between two days of the visit.

Q. Then I will change that question to, Did you go back again after that time?

A. No; I did not.

Q. Then will you sum up your testimony by an expression of opinion about the camp and what you saw? Your opportunities have been so great to inspect camps and command troops that your opinion in that way would be very acceptable to the commission.

A. I did not see anything in connection with that camp that I had not seen in connection with all large encampments; nothing more to condemn.

By Colonel DENBY:

Q. Well, do you mean those camps were like the old camps?

A. What I meant was this: That there are certain offensive things you find in very large encampments. It is like a large city. If you take a single instance and make that apply to the whole it would be wonderfully unfair. There were one or two regiments that I saw on my last visit going to the canteen in long columns, one following another.

Q. Do you regard the canteen as injurious?

A. Generally. Yes, very; and particularly in a southern climate. I think myself that with our Vermont men the canteen was exceedingly injurious. They were first troubled very much about the army ration, and they would get anything to eat that they could buy around about, and there were hucksters coming near.

Q. And you regard the hucksters how?

A. As another nuisance; and the men would go and buy all sorts of stuff, and then get beer on top of that.

Q. And they had a good deal of ice cream, too?

A. I suppose so. And they would then have the diarrhea and be sick.

Q. General, do you think that modern hygiene and sanitary science could overcome those difficulties, even where large numbers of troops were together?

A. I doubt yet whether the physicians have found the cause of typhoid fever. They think they have, but I do not. I can not see why there should be typhoid in Michigan and Springfield, Ill., and in Camp Black before the soldiers came into the United States service at all.

Q. What did the Christian Association do—is it the Young Men's Christian Association?

A. They are back of it, but it was called the Army and Navy Christian Association.

Q. What did they do—did they furnish delicacies, or what?

A. They furnished first, as I said, these tables and chairs and letter paper and envelopes for them, so they could write home, and magazines and newspapers in abundance.

Q. Did they furnish postage stamps?

A. I am not sure about that. I think they did. And with the dailies they supplied patriotic song books and hymn books. They were piled up in the tents, and they had meetings in these tents every day for those religiously inclined; but they did not take much time with that; and they had a little shanty kitchen where they supplied delicacies for anybody coming in who was sick. They made for their guests soup; they had nice bread and butter, and there was ice water. They had an immense ice tank always there. One time they cried out from all parts of Chickamauga that there was no ice and the Red Cross had none. We were cooperating with the Red Cross, with Dr. McGill, and this time when there was no ice except ours we telegraphed to New York, "Shall we furnish the ice?" and they telegraphed back, "At once," and all the ice necessary, costing \$500, was furnished.

By General WILSON:

Q. By whom?

A. The Army and Navy Commission. It was under the Young Men's Christian Association.

By Colonel DENBY:

Q. Was it incorporated?

A. Yes; the international association, which has its representatives in every country in the world. They had Christian young men working with them from the North and South.

Q. And you met everywhere with the cooperation of the general commanding?

A. Yes, sir; yes, sir. There was either 23 or 28 of those pavilions in Chickamauga alone. It was intended to have one for every brigade. I was trying to unify the forces so there would be no complaint from anybody—to unite Catholics, Protestants, and everybody.

Q. Was that the result, General?

A. So far as I know.

Q. Don't you think there was feeling in the movement?

A. I never saw any. Sometimes some of them would withdraw from us because they thought we were inclined to be Protestant, but I never heard any complaint from anybody. Some of the Catholic chaplains cooperated with me as heartily as anybody. I never had any difficulty with any of them. I used to gather them all together wherever I could and consult with them. At Tampa there were at first no chaplains—no regiment chaplains. The Army had post chaplains. That was in May. About that time the War Department sent the post chaplains down to the regiments.

Q. Each regiment had a chaplain?

A. Well, after that, most of them; not all of them.

Q. Where did you go from Chattanooga on that trip—that was about the 4th of July, I think you said?

A. I went to the camp at Knoxville from the camp at Chattanooga.

Q. How did this Army and Navy Commission get its money?

A. By voluntary contribution. I made twenty-seven addresses to mass meetings in the month of June in New York and vicinity, Chicago and vicinity, Columbus, Ohio, and vicinity, and so on around, just telling what we were doing and asking for contributions, and the people gave them.

Q. Have you any idea of how much money you spent in the rough?

A. No; I have not seen any report. The headquarters is at 3 West Twenty-ninth street, New York City, but I know they say it will take \$160,000 to keep up the

work of the international committee or the commission under its control for another year.

Q. They are going to keep it up?

A. They are asked to by the soldiers of Cuba. They sent \$600 of their own money from Cuba to have it continued. They are thus eager to have these facilities.

Q. Did you operate in Manila?

A. Yes, sir. I don't know how many young men went to Manila, but there were some. They went there, following right up with their pavilions.

Q. General, you may go on and state where else you went.

A. I went to Camp Alger. I turned back to Camp Alger from New York during that month of June, while I was going from mass meeting to mass meeting. I wanted some fresh stories and facts from the field, and I went there and spent two days at Camp Alger. I saw Duffield's brigade, mainly that brigade at first; others gathered in the night; and I saw the camps during one of the days I was there. I rode all around. I was stopped several times and my carriage examined to see if I had any liquor inside. This was as I passed the outposts. They simply examined the carriage and let me pass on—the pickets. I was most of the time close by the Sixth Massachusetts Regiment, and I thought I never saw a prettier camp than that regiment furnished. It had its own pavilion.

Q. What did you think of the camp in general, of its suitableness?

A. Well, they had wells to furnish water. If I had been choosing a camp I would not have chosen one where there were only wells; there is a danger always in digging wells where you have sinks in the vicinity, because of the seepage; and if you can get near running water it is much better for the camp. There was an abundance of water in the vicinity not many miles away. The camp would have been a good one had it been merely temporary.

Q. It was moved the 15th of July over to Camp Meade?

A. Yes, sir; that was a splendid move. I saw there between the Sixth Massachusetts and some other regiment, or two other regiments, on the height beyond but near the corral, near where the transportation was—the mules and wagons—a line of sinks. They were not greatly offensive and they were perhaps as well located as sinks there could be, and yet the men were coming and going all the time to and from those sinks; and I thought I should want them a little better taken care of. I visited one myself and it was offensive—I mean, a little offensive in the immediate vicinity. I did not notice anything a little way off to the right or left. I should say that the great trouble in most of the encampments was with the sinks—getting them too near the line of officers' tents. That is all my criticism.

Q. The line of officers' tents is generally put at the head of encampments and the kitchen at the other end?

A. Yes, sir.

Q. Now, on what side do you think the sinks should be put—on the flanks, or what?

A. I am speaking only of distance. You must judge the place to put them by the lay of the ground. The officer's judgment who is commanding must come in. You must have them far enough away to prevent the effect of the sinks on the soldiers; the farther the better, unless you have running water to purge and cleanse the place all the time. There was very little sickness complained of at Camp Alger at that time, but there was some complaint made of one of the hospitals, and it had been published in the papers. A lady in Washington had made the complaint. I was taken by one of the surgeons—I think he wanted me to see his hospital, and that was a division hospital. It was under a volunteer surgeon, whose name I did not know at the time, very much of a gentleman, who went all through it with me, and I never saw a hospital in any better order than that was. I am accustomed to inspect things of that kind, and I saw nothing out of order. I

heard one or two of the men say, "All we complain of is, we don't get enough to eat."

Q. Did you hear complaint of the rations?

A. Yes; but there was abundance to eat right there. These men were not in condition to eat the army ration or any coarse food, and, furthermore, the doctors at such times were anxious to keep them from certain food. Some edibles would kill them at such a time, and they were in such a condition of mind and body that everything looked blue to them. That was the conclusion that I came to there.

Q. You heard no complaint from the men generally in the camps about the want of food?

A. Nowhere else. The men were apparently in splendid condition. When that Sixth Massachusetts marched out to drill it was a splendid regiment. I found generally that where the officer in command, or his adjutant, had had experience and knew what he was about, the camp was in good shape; where he was new to the business—why, sometimes the soldiers would not raise up their tents after a storm, and neglected other things which are always done where there is experience—done for the health of the men.

Q. You had nobody employed in the hospitals?

A. No; only our men went daily to visit them.

Q. But they went rather in a religious character than as nurses?

A. They did not go as nurses; they afforded any little relief that might be asked of them. Sometimes our singers were great favorites. We had one named Maxwell who sang so sweetly that the men who were ill liked to hear him sing, and when it was proper the physicians permitted it, and he would sing a hymn or song.

Q. In your various visits to the camp did you see the female nurses?

A. Yes, sir.

Q. And what did you think generally of their administration?

A. In Key West I went through four hospitals, and the nurses were there in charge. That was the last visit in July. You asked me where I went next; I said to Knoxville. There I visited Colonel Brown, who was of the Regular Army—

By General WILSON:

Q. The Fourth Tennessee?

A. Yes, sir. That was a perfect camp. His sinks might not have been as in the regulations, but everything was as neat as can be in every part of his camp; he had one of those pavilions, and he gathered his men in there, and wanted me to say a few words to them, and I did. I noticed everything in sight of his camp from the time I came until I went away. The whole pleased me very much. I heard that Tyson's, in the immediate vicinity, was the same. Some officer told me I would find Tyson's superior; but I do not think any other could have been superior to Brown's. But there were no other troops near either to interfere.

Q. He was a Regular Army officer?

A. Yes, sir; and so was Tyson. Tyson's was called an immune regiment. They had not yet gone to the front. I went thence to Fitzhugh Lee's camp.

By Colonel DENBY:

Q. At Jacksonville?

A. Yes, sir; at Jacksonville. And I stayed there two days, and as General Lee (Colonel Harrison escorting me) wanted me to inspect his camp, I went all through it, riding in every direction. I did not believe before I went there that it was possible for an encampment to be put in as good condition at Jacksonville as that was. The drainage had been very carefully attended to, frequently flushing the ditches, and the facilities for bathing I never saw so universal and thorough as there.

Q. Do you mean the bath houses?

A. I mean the arrangements for each soldier to bathe. The water was brought in and the people furnished lumber. We went through the hospital and found some typhoid fever there, and saw the doctor in charge; I think they told me he was a Norwegian or Swede; he was a fine-appearing gentleman, very decided in his manner, and he said, "Yes, we have typhoid fever here. It was brought here. It did not originate here." And so I do not think they yet know the cause of typhoid fever.

Q. Did he say where it was brought from?

A. No, sir; but men came with the poison in them, and it developed there. Of course, in the vicinity of Jacksonville a man not acclimated would be apt to have chills and fever, might have a touch of malaria before the typhoid fever existed. Still, that hospital was in prime condition; no complaint was made to me. I was greatly delighted to see the young men of the North and South associating together as though they were the best of friends, the convalescents visiting each other's couches. The soldiers spoke well of their officers and commanding officers. They came into town looking well; there was no drunkenness.

Q. Did you see much drunkenness where you visited?

A. I saw a great deal in the city of Chattanooga. I did not notice any at Chickamauga; but in the vicinity of Chattanooga soldiers broke camp and went in there, and I saw some young men in a condition that distressed me. I did not think it was possible for such young fellows under discipline to drink as they did. But any three regiments out of the 50,000 men could have furnished all I saw in Chattanooga. Some regiments, of course, had no discipline. The officers could not keep the men in camp; they ran away. I picked up one little fellow, a handsome youth, on the street, and he declared that he did not care whether he went to perdition or not; "it made no difference." Major Whittle and myself took him to the station and put him under such charge as would get him back to his regiment without further harm coming to him. I think those things were regulated when General Brooke found out about it a little later, by sending a patrol into the town to pick up the disorderly and send them back.

Q. That was not the case at Jacksonville when you and Colonel Harrison rode—everything efficiently done?

A. Yes, sir. When I was there things seemed to have settled down to general good order on the part of the men who came into the city; they behaved well.

Q. Where did you go from Jacksonville?

A. To Tampa again; and this time the whole corps had been broken up, and there were left but a few regiments and a large body of recruits. Colonel Coates was in charge of these recruits, and he invited me out to speak to them. They all came together, and I made them an address. But every place was like an old, abandoned camp. The whole region did not present a wholesome appearance at this time. There was a good deal of waste stuff about.

Q. Did you go to any other place?

A. Yes, sir; I went down to Key West, and at Key West I found our friend from New Orleans, Mr. Steele, afterwards a chaplain in the Navy. He had hired a tobacco factory and made a pavilion of that. It would hold 500 men or more. He tried to gather in the sailors and soldiers, so that they would not get into the saloons first. He was gathering them in. He was located near the dock, and when you landed there was over his door the flag and "The Army and Navy Commission" in large letters. He invited them in, and the first thing they saw was a big tank filled with ice water. The men first, in those hot days, took a big, cool, refreshing drink of ice water, and then sat down to read and talk or write. The first night I was there I addressed a combined assemblage from the Army and Navy. I visited four hospitals there, and went carefully through them; there I saw the women nurses. Nothing can replace them.

Q. You are in favor of them?

A. Wherever it is practicable. You get in hospitals the delicate care that you can get nowhere else. With men detailed from regiments, who have no experience, it is difficult for them to know what to do; but these trained nurses know just what to do, and they do their work promptly and well. I would have them everywhere it was at all practicable.

Q. Would you enlist them as a corps, or employ them on contract?

A. I do not like bureaucracy. I do not like to put everything on one man at Washington. It is impossible for an officer at Washington to know in season what is going on at Chickamauga, as it is too far away. The commanding general or officer on the spot knows best; and I think if the commanding officer had charge of his camp it would be better than to have it run from Washington. That should be under the direct supervision of the commanding officer of a given camp, and you should hold him responsible for it. Of course his surgeon must attend to it, but his surgeon is, or should be, his staff officer, and he must do his duty under the direction of the officer in charge of the camp; otherwise there will be friction and trouble.

By General WILSON:

Q. You said you did not like bureaucracy, and you said some one should be responsible or held responsible to see that certain things were taken care of, and that those things should be taken care of by the officer in command of the camp and not at Washington. Now, just what did you mean by that statement?

A. Perhaps I could give a little suggestion and then you can put your question again. I went to General Brooke and sat down with him; he was in my command during the war, and often we met afterwards, and I knew him very well; and as a friend he said a good many things to me. In some things at that time he had difficulty in obtaining answers to things he deemed of the utmost importance touching supplies from Washington; but I think that was remedied within a short time afterwards; but at that time he had great difficulty. I wrote immediately to the War Department, stating some of his difficulties, and he, I believe, was relieved from those right away. But how far the Surgeon-General interfered with his work and undertook to run the hospitals from Washington I could not say.

Q. Then you referred in your original remark simply to the Surgeon-General's Office—in your remark where you said the detail of a camp should be in the charge of the commanding officer of the camp, or under his direction, and it should not be managed directly from Washington?

Colonel DENBY. I understood him to refer only to the nurses.

The WITNESS. I meant that if I had my way I would not put upon the Surgeon-General the heavy responsibility of conducting an encampment or geographical department himself, under his direct command, direct from Washington at all, but I would hold the commanding officer of a camp responsible for his camp; give him a surgeon on his staff and let him make requisitions in quantity for supplies, and have the commanding officer approve them.

By Colonel DENBY:

Q. You think it better that the commanding officer, through his staff officers, should employ these nurses, regulate their conduct, and so on, rather than it should be done from Washington?

A. The employment would be immaterial provided they had a thorough method. It might be wise to have some general supervision to get the very best, but when they get into a camp the responsibility shifts. They should be accountable to the general commanding that camp, and he, through his medical staff, have control of them.

By General WILSON:

Q. When the Colonel asked you about nurses, you interjected the remark that

you objected to bureaucracy. There are few of us who do not object to that, but what I want to get at is whether you had the impression from that that General Brooke was not in absolute command of that camp.

A. I was not thinking of his camp. I did not see any female nurses there at all. There were visiting ladies in Chattanooga, who went there with milk and supplies, who went to the Red Cross people, whom they were assisting.

Q. Then in the camp where you found them?

A. At Key West, where I found them, they were in the hospital and doing their duty and doing it well, and I do not know to whom they reported or were responsible in any way. I do not know that. But your compatriot asked me in a general way what my opinion was.

Q. What I want to get is just what you meant by that expression of bureaucracy. You conveyed an impression to me, as a member of the commission, that something had suffered from bureaucracy.

A. I think it did.

Q. What did? That is what I want.

A. Take my old department—the Ordnance Department. A requisition is made through the general in the field upon that department; if you go through sending everything to Washington and having the requisition there examined—especially when you have so many camps and so many requisitions—before any action is taken it takes a long time to get the supplies, often a very long time. But if you can have a depot near by and have a good ordnance staff officer with the general commanding, then—say in the case of General Brooke—General Brooke with his ordnance officer can supply the requisition right away; and the depot should have an abundance on hand and right there. There was so much delay in getting ordnance supplies that I thought the Ordnance Department was being run from somewhere near Washington, rather than from the neighborhood.

Q. With a large number of men in the field, and these camps at Cuba, Porto Rico, and the Philippines, you think this great multitude should not be run from Washington, but we should have supply depots in each place, where the commanding officer could get what he wanted?

A. Of course; the head of a bureau would be obliged to have a big supply at each place, each depot or subdepot, and it would not, as a rule, be difficult for him to estimate the probable future needs. When I was chief ordnance officer of the department in Florida in 1866 and 1867 General Hearney was in command, afterwards Colonel Loomis, and all the supplies were, as a rule, in the depot there. The officers came up with requisitions, and Hearney or Loomis approved each requisition, and the articles were issued.

Q. I agree with you that there should be depots upon which the commanding officer can draw for supplies. Did you go elsewhere from Key West?

A. Yes, sir; I was invited on board the *Lancaster* by Captain Perry and the admiral (Admiral Remy) who then made it his flagship, and there I acted in precisely the same way as at the rented factory, as did those who were with me. I had assistants like Mr. Howland, my secretary, and the chaplain, Mr. Steele, and those around about me, and we had exercises just as we had them on land. I did not know it would be practicable, but all those sailors off duty came in from the transports and neighboring ships, and from all around, and we had a very nice meeting the night I was there. My idea was to encourage the sailors as I did the soldiers. My idea was the better the man the better the soldier, and the better the man the better the sailor.

By Colonel DENBY:

Q. I suppose the sailors enjoyed your army stories as well as the soldiers?

A. They seemed to, and I received the same warmth and the same response. The commission had for speakers not only myself, but Professor Torrey, of Chi-

cago; Drs. Munhall and Dixon, of New York, and laymen and singers, like Sankey, Maxwell, and Burke.

Q. Any other places visited by you, General?

A. I went then to the *Niagara* and thence to the *Vicen*, and I passed where Cervera's fleet was sunk. Later I went ashore at Santiago, and General Shafter, on the *Vicen's* deck, showed me the hills around and pointed out the details of the battle.

Q. What time was that you were at Santiago?

A. I left there the 29th of July.

Q. Your association was working there at Santiago?

A. We had only one pavilion down there, with the young men to run it.

Q. And they were doing the same work as elsewhere?

A. Yes, sir; and quite effectually. I saw Clara Barton. She came aboard the *Comal* to me, and her workers with her. They explained to me what they were trying to do for the soldiers, sailors, and citizens, the starving and needy, and I was pleased with her description of following up the soldiers at the front and relieving the sick and wounded with soups and such things as she had to give. I had with me Dr. Gill, whose mother was a Cuban and who could speak Spanish and English perfectly, and also several Cubans who were going down to nurse in the Cuban hospitals and do what they could. I had opportunity in that way during a long voyage to learn their feelings on the situation. One was Dr. Zuniger, who had been a professor in the medical college at Havana, and there were several other prominent people.

Q. Did your organization at Santiago give you any information about how the sick were being treated in the hospital?

A. There was a good deal of sickness in the hospitals, but I was not able to go ashore. I had to hasten back to meet engagements in the North that were imperative, and I was caught for quarantine in Lower Tampa Bay for ten days, so I did not see the sick in Cuba; but a little later, after the quarantine on board the *Segurança*, I met 25 different organizations, represented in what are called convalescents. They were still laboring under sickness—malaria—and I was with them eight days and nights, all the way to New York on the *Segurança*, a large Government transport.

Q. That was near Tampa?

A. Lower Tampa Bay, 20 miles below Tampa. The quarantine doctors would not let me go into Tampa.

Q. How were these men taken care of?

A. Well, Major Townsend, a commissary, was placed in charge of the ship so far as everything pertaining to the supplies was concerned. He had several officers who aided in organizing everything on board. When I came to the ship, about the 10th of August, I think it was—it was the Sunday nearest the 10th of August—when I first struck the ship there was a good deal of murmuring. I thought I never saw such a gloomy place. People had been brought there from Egmont Key—officers and soldiers—brought there to be sent North. One man I met pulled out some money and said, "Here is money; I want something to eat."

Q. Was he a soldier?

A. Yes, sir; a kind of leader. I spoke to a doctor near by, telling him to get him something to eat right away, and the doctor got some coffee and bread to eat; then the man thought differently of the Government. I met another man, a regular, who had served under me once; he said, "General Howard, if they don't give us something to eat on this ship we are going to raid for food." And I said, "I am with you myself; I am an old forager; but give us a little time and see if we don't fix things right." Townsend and his able assistants had been arranging to get some food for them, and in fifteen minutes they were all marching in line and getting food served to them. They had a bowl of soup and nice bread and

butter—just what they wanted. They had enough surgeons, too. There were, perhaps, forty men under the care—convalescents and all—of each. There were several officers, Lieutenant-Colonel Logan, of the Ninth Massachusetts, was there, Colonel Theaker, of the Seventeenth Regulars, and Major Latimer, of a Michigan regiment, and Major Llewellyn, of the Rough Riders. He was dreadfully sick; had lost all his flesh. He cried and said, "General, I shall never be able to walk again;" but after a while, with care, he was able to see things in a different light; he was able to walk before he got to New York. I saw one young man they thought was dying, and I came up and touched his head and he opened his eyes, and I said, "What is your name?" and he said, "Cochran." And I said, "Where are you from?" and he said "Baltimore." Then I asked him to what regiment he belonged, and he said he belonged to the Third Regulars. And he brightened up almost immediately. The doctor looked at me and said, "You have done him more good than medicines." I went to some other sick people for a few moments and then turned around and saw Cochran again; he opened his eyes and spoke with wonderful strength, and he said, "Aren't you General Howard?" I said, "Yes;" and he said, "Didn't you tell us the story about McDonald, at Mobile?" and I said, "Yes;" and he said, "I thought so." This McDonald was a soldier who had said he was glad that he was wounded and not myself when he was shot. Well, this young man Cochran grew better and better all the time he remained on the ship. He was an Irish boy from Baltimore. His comrades said he had been an athlete, one of the strongest men in the regiment, and that he was brought down that way by this severe fever. Whether it was the yellow fever or not, I do not think anybody could tell. There seemed to be a transition stage between the severe malarial fever and the yellow fever. Probably many of them had malarial fever which they thought was yellow fever, but which was not.

Q. Did that man get well, General?

A. I don't know; I haven't heard of him since.

Q. What was the name of that ship?

A. *Segurança*.

Q. You were well manned and supplied?

A. The Secretary of War had telegraphed down to Townsend to see to it that those men had every supply necessary; that nobody on that ship should want for anything.

By General WILSON:

Q. Was that the ship on which Captain Worden, of the Seventh Infantry, came home? He was said to have been quarantined for several days, and the newspapers said that in his dying statement he said he had nothing to eat but lemon peel; but the doctor said he had taken care of him, and that he was able to walk to the cars.

A. I heard of Worden; saw him on the *Comal* at Santiago; but he was not on board that ship. Brooke's son was on board, and other officers you would know.

By Colonel DENBY:

Q. Did you land at New York or at Montauk?

A. Landed at Governors Island and New York, sir; and the sick were at once taken care of in New York; everybody on that ship—some went ashore at Governors Island and were sent to one place and another.

Q. Can you tell us anything about Camp Wikoff at Montauk?

A. I did not go there; I do not know about that.

Q. Is there any other camp you visited after that?

A. No, sir.

Q. That brings you down to about the middle of August?

A. Yes, sir; I went ashore the 17th of August, if I remember rightly.

Q. On the ship what was your connection with the sickness?

A. Myself and my secretary slept there among the sick.

Q. In New York?

A. No, sir; only on board the *Segurança*, and it gave him fever. He had a severe attack, and he has had a second return of it. I am afraid he can not pull through. I had quite heavy catarrh for a few days, but I threw it off. That was all that was the matter with me; but still I had to go home and recuperate. When the war was over I went to other work.

Q. You had no more to do for the soldiers, then, after you arrived in New York?

A. No, sir; not directly. I have met with naval officers since—

Q. We are confined here to the Army, the War Department.

A. Well, I have several times since helped at different large gatherings to raise funds to help the soldiers. You asked about Wikoff. I helped to raise funds for our workers there.

Q. Your idea now is to continue the work of the organization with funds at the posts now existing?

A. Yes, sir. I think it would be a good thing to have good hospitals established, for example, in Cuba, and something equivalent to the pavilions attached continued.

Q. General, you, as we all know, have been in the Army all your life, practically.

A. Yes, sir; forty-eight years.

Q. You are a graduate of West Point?

A. Yes, sir.

Q. What was your age when you graduated at West Point?

A. Twenty-three.

Q. You have been connected all the time since with the Army?

A. Yes, sir.

Q. Actively, except that since you have retired—since that time you retired?

A. Yes, sir.

Q. Well, taking into account the unpreparedness of the country, the number of troops assembled there, the fact that they were scattered, as you know the Regular Army was, the suddenness of the war, what would you say in general as to the duties performed by the War Department, as to whether they were well performed or not, and what criticisms would you make, if any?

A. As a general rule, I think the work of the War Department has been marvelous and well done. It is a very large work. If there had been time to have raised up a regular force and to have put it in order and had it well drilled and disciplined and armed and given the best modern arms and smokeless powder, why, of course, it would have been better; but there was no such time. The Army was small, immediately raised to over 60,000 men, to be supplied right off. Well, it is almost incredible to think how quickly it was done, and then while taking care of the volunteers at the same time. Now, we have learned some things by the war. I would not, if I had to do it now—I would not do what I would have done without this late experience in the way of planting the camps. I would not from present sight have sent our men to New Orleans, to Mobile, to Tampa, to Jacksonville, or to Camp Alger to fit them for going to a more malarious region. I think we have learned that it is better, primarily, to have them in the most healthful camps you can get in the United States. You can get them near enough to your transportation at any time and keep them there in health for use in such a place as Cuba or Porto Rico.

Q. Where would you have kept them?

A. Well, anywhere in the vicinity of New York or healthful harbors.

Q. Would you have kept them in their State camps until you were ready to march?

A. No, sir; I was referring only to the location of the camps. Newport News was a fair place to take troops from, and New York just as good.

Q. You mean, the idea of taking troops South to be acclimated, when they are to be taken later to a tropical or more southern climate, is not a proper one?

A. I think it is not; we see that now. Notice our marines that were in the vicinity of Portsmouth, N. H.; they were in perfect health. They went to Guantanamo, and remained in perfect health, although encamped on the same sort of soil as the others. They set out in health. It shows that it is well, if a man is going to a malarious climate, to go in health, and just keep up his health. Most of us would have said, "Get them acclimated before you send them there;" but that is a bad thing.

Q. Any other suggestions, General?

A. That was one thing learned from the war, but it is really not in criticism of the authorities. At the time they planned these camps they did what everybody in the Army would have said; it was the best preparation that could be had, and it was proper, when they went to Cuba, to get them there in the shortest possible time. Then there is another thing, with reference to the choice of individuals to do the work of the Army, lifting them to higher grades; men have to exercise their judgment in that, those in charge. The responsibility rests with the President of the United States, and we can always criticise that more or less; but I have no doubt that conscientiousness and uprightness were in their hearts when they did it.

Q. Is it to be inferred from what you have stated that appointments might have been improved on, or that those made ought to or could be criticised?

A. Not exactly that, I would not say; but an old officer who has had a good deal of experience is very apt to be very much inclined to look to experience. Young men are ambitious to go on and take responsible positions, very naturally; but if you can get a man with health and strength and at the same time experience it is a good thing.

Q. I believe you stated that the law now is that a retired officer can not be employed in active service?

A. Yes, sir; they can not.

Q. Then it would have been impossible to employ the retired officers without an act of Congress?

A. Yes, sir.

Q. And would you advise that employment now?

A. I think the President recommended that, but it did not pass.

Q. Would you advise that now?

A. One day I met a young officer and I was talking with him in favor of using experienced officers, such as we have in this country, who are still in health and strength, and he said, "Why, General Howard, aren't you willing to give us a chance?" Now, if that is the feeling of the Army, I should say it is better not to put on the retired officers. Rapid promotion keeps up the esprit of an army.

By General WILSON:

Q. But, General, don't you think there are plenty of positions where strong, vigorous men, such as yourself, could take charge, and send the young men down to the front to face the enemy?

A. Yes, sir.

By Colonel DENBY:

Q. What have you to say in relation to that being left with the discretion of the President?

A. I think it would be a wise provision of law to make it discretionary with the President to use the retired list as far as practicable for the filling of positions that must be filled if you should increase our Army; and it would be better to fill them

with retired officers than it would be to trench upon the active organization you may want in the field; and if the same discretionary power was given to him with reference to the Army as is now given him with reference to the Navy it would be ample. The difference between the Army and Navy is that they retire officers in the Navy at 62, and ours in the Army are retired at 64—two years older.

Q. Have you anything to say with regard to the character of the civil appointees of the war? Did it come under your observation to notice how they were discharging their duties?

A. Well, from my observation, officers who had had experience in commanding troops were vastly ahead of those who had had no experience in corresponding positions, especially as colonels of regiments. Where a regiment had field officers without military experience before the regiment was not well cared for. Generally, where one of the field officers had had such experience, either in the Regular Army or volunteers, or somewhere, the regiment was well cared for.

Q. And how as to the staff appointments—inspectors, quartermasters, and commissaries?

A. Precisely the same rule applies to the quartermaster. The quartermaster or commissary without experience has a hard time of it, but some of them were wise enough to get other people to help them, and they did well; like the one I told you of; he had some regular officers to assist him, who knew their business thoroughly, and it made a perfect system. I do not think myself that we should have allowed troops to be mustered into the service of the United States without the officers undergoing a practical examination by a board of competent officers. We had that in the civil war. Those unfit went home, and those who were fit stayed. That made a great difference. This war was so short it was hardly practicable to do that, but it seems to me there should be a provision of law to that effect; that when a regiment comes into the United States service the officers should undergo an examination; the medical officers also, with a competent medical man on the board to examine them, and other officers to examine the others, and officers coming into the service, after passing a proper examination like that, would have everything in their favor. With reference to the men, we must take more pains to see that the men are in a healthy condition when they come into the United States service. I think that could be very easily effected. Some one said that the governors would lose their prerogatives. Let the officers be nominated by the governors, and they will be particular to nominate good men when they know they are to be examined.

By General WILSON:

Q. How long after the war began in 1861 did these examinations take place which you refer to?

A. I was in the first battle of Bull Run, and after McClellan took command General Slocum and myself were on a board, and we had a certain number of officers to examine.

Q. I was president of a similar board at New Orleans. That is why I asked you.

A. I remember General Slocum said to me, "What a pity it is, Howard, when a man has given his money to raise a regiment that we should take it from him and send him home." But it was done. He did not know how to drill his regiment, and, depending on his subordinates, he became a laughing stock to everybody. I had a great experience with regiments in the West. I found splendid men in command of them.

Q. Well, is there any other suggestion, General, that you could make to us as to the efficiency or the inefficiency of the action of the War Department?

A. There was one thing that I thought would be a great help to us, and I may say it without giving an opinion as to what has been done, and that is to have a staff school somewhere and have all officers who would serve on staff, or were

likely to, to go to that school long enough to learn their duties. A staff officer often has to stand for his general, and therefore often an incompetent man is in that place. Sometimes, however, a battle turns on the efficient or inefficient performance of those duties, as in the Rosecrans case, where the battle turned on one officer. How important, then, that the staff officer should know his business, and surely there should be no incompetent officer in the quartermasters or the engineers for the same reason. A man may have brain enough, he may be a good merchant or clerk in a store, but you make him an engineer and send him out as such, and you make a big mistake; and it is the same in the Quartermaster's Department. Taking the case of the Adjutant-General. A young man, for example, who could not pass the examination at West Point and who is permitted to resign. Now, make him a major in the Adjutant-General's Department and let him stand for his general on the field of battle—I wouldn't risk it. It is too great a risk. That is my opinion only. It is very often done. A man is bright and has good connections, and influences are brought to bear, and the first thing you know he is put above his classmates, and perhaps lifted to the rank of major or lieutenant-colonel.

Q. Officers now have to be examined for promotion in the Regular Army right along?

A. Yes, sir; I know that; and they are thoroughly examined to enter the service. But sometimes it is thought that it is no matter what kind of a man you put in as a paymaster—but you must remember that he gets in with the rank of major, and you must also remember it makes the old men who are captains and have worked for promotion twenty years feel much chagrined. I may, however, refer to something before the *Segurança*. That there was neglect somewhere is certain, or those men would not have been in an almost starving condition; but after a careful looking into all the cases that came under my observation I can say it was the condition of the men, on account of the sickness they had undergone at Santiago de Cuba. They thought everything was wrong and bad, and they could not eat the things there at hand, 20 miles below Tampa. They wanted something to eat, and were restrained from eating by their doctors—that is, from eating much, for fear they would die. But when the reaction set in everything was all right. When we got to New York they thought a great deal more of the President of the United States, the Government, and the Secretary of War than they did when they left Tampa Bay. I went through the same thing in 1861. Just after the first battle of Bull Run the measles set in in my command; they were followed by pneumonia and typhoid fever, and the condition of affairs was very bad, and those ill thought the Administration was at fault until they got well.

CINCINNATI, OHIO, December 23, 1898.

TESTIMONY OF ASST. SURG. GEN. JOSEPH T. WRIGHT.

JOSEPH T. WRIGHT, assistant surgeon-general, United States Army, being duly sworn, testified as follows:

By Dr. CONNER:

Q. What position did you occupy during the late war with Spain?

A. Disbursing officer for the Medical Department and in charge of medical supply depot at St. Louis.

Q. At what time did you take charge of the supply depot?

A. On the 16th of December, 1893.

Q. Will you be kind enough to tell us in your own words what the condition of the depot was as respects those supplies at the date of breaking out of war, the 21st of April?

A. The condition of the depot at that time was such as sufficed for the supply of the military posts, say 100, on a peace basis. We were not supplied for any extraordinary demands.

Q. Had any requisitions or contracts been made within comparatively few weeks for an extra amount of medical supplies for the Army?

A. No, sir; not at that time.

Q. Had you or had you not early in March made the requisitions for the six months' supply of the Army?

A. We had invited proposals for the supply; and if I recollect correctly, they were pending. It is customary to invite proposals every six months.

Q. So we were informed in New York. Those proposals had not—at least no contracts had been made that you know of at the time of the breaking out of the war for this extra supply?

A. No, sir; I think not.

Q. How soon did you receive orders from Washington to secure the supplies for the expected large army?

A. The first communication from the Surgeon-General's Office bearing upon that point was received about the 5th of May, 1898.

Q. You had no notification prior to the 5th of May that you were expected to provide supplies in large quantities?

A. No, sir; not as I recollect.

Q. Was this order of the 5th of May a written one or a telegraph order?

A. I am inclined to think it was written.

Q. Did it direct you should make requisitions for additional supplies, or did it inform you additional supplies would be very quickly sent you?

A. It directed we should take steps for securing certain additional supplies required for field service.

Q. And those articles that were needed were what?

A. They related to such things as hospital-corps pouches and orderly pouches. There was two kinds of pouches and, I think, dressings. That, I think, came a little later.

Q. Were you at any time ordered to purchase any medicines in large quantities?

A. Yes, sir.

Q. At what time?

A. May 5. This is the extended list of articles ordered to be furnished. Now, the next item is a letter from Washington, dated May 27, 1898, from the Surgeon-General, directing the purchase for the Medical Department, to be delivered at the depot as early as possible, such articles as folding field furniture, 50 sets of commode chests; folding desks, number, 50; food chests, number, 50; mess chests, number, 50. This is the most important letter that was received at the depot, and, in fact, I might say up to that time we had not received any full and explicit orders in reference to laying in supplies.

Q. According to this letter, this practically establishes a 50-bed hospital, does it?

A. Yes, sir; if you will notice the last clause. That is the most important. That folding field furniture, I think, was designed specially for regimental hospitals. That is, at the time when it was thought regimental hospitals would be established, but it was afterwards decided to have the division hospital. This bears on the question. This is a letter from the Surgeon-General: "Send as early as possible by fast freight to Sixth Volunteers, Knoxville, one regimental advance outfit." That is dated May 4.

Q. At what time was it determined, so far as you were informed, to establish a supply depot at Camp Thomas—at Lytle; how long before that order was issued which directed you to send it?

A. The first noted here was directions received on the 13th of May and shipped on the 14th of May.

Q. Was that the first shipment that you made to the depot at Chickamauga?

A. I am inclined to think so.

Q. This first order of yours was directed to be sent there?

A. We issued a great many supplies to the chief surgeons at Camp Thomas.

Q. Did that precede the shipment to Lytle?

A. Yes, sir.

Q. Tell me how early you filled requisitions from the chief surgeon at Camp Thomas.

A. The first requisition was May 5.

Q. For what number of sick, think you, does that requisition provide?

A. By the way, it is dated May 5 and was received May 7. The shipment didn't occur until a little later, because it took a little time.

Q. Can you give me the date of shipment?

A. I think I can. It was invoiced May 12.

Q. Did you receive any notification of the time at which it was received at Camp Thomas?

A. No, sir; we did not. In some instances there was a week after shipment we received a telegram stating that the supplies had not been received, and immediately we communicated with the quartermaster, and he telegraphed to the railway authorities, and invariably the information was that the supplies had been there several days. The only way I can account for it is there was a congestion of the freight trains at the terminal point. I know there was very much surprise in many instances, because we worked very hard in every case to get those supplies off promptly—Sundays and late at night.

Q. The records of your office don't show at what time the supplies were received at the other end of the line?

A. No, sir; I couldn't tell you at what time the surgeon in charge of the general hospital received the supplies. I suppose he was very busy, and probably might not have been able to. He didn't send his receipts for a long time. It is only within the last month or so we have been getting some of the receipts, and it was only when complaints were made, or inquiry was instituted, and telegrams were exchanged, and the railway authorities invariably said the supplies were received, perhaps the day before, perhaps three or four days before, and in some instances even a week before the telegram was sent complaining they had not got them; and I have no doubt at all, so far as we are concerned, that a great deal of the trouble originated from the congestion of freight. I can't understand it in any other way.

Q. At what time were you officially informed of the establishment of that supply depot at Lytle?

A. The acting medical supply officer at Camp Thomas—the first requisition to the acting medical supply officer was dated May 17. The invoice was dated May 30. The requisition was dated May 17. It had to go to the Surgeon-General's Office. From there it had to be approved and sent to us. That was a requisition for 10,000 men. It was dated May 17, and the supplies were shipped May 30. Now, when you consider the number of details in putting up supplies for 10,000 men, and the necessity of hustling to fill them, we did pretty well.

Q. Was that a complete requisition, so far as the field-supply table carried it?

A. It was not entirely so. For instance, the first item is carbolic acid, then certain tablets, then quinine, and powdered mustard. Then comes bandages, emergency cases, plaster of paris, and cushions, and antipyrene, phenacetine, bandages, gauze (plain, ligature, catgut, and silk); sterilized splints, wire, sponges, cotton, and such articles. The first requisition was May 5. Now, in some instances the requisition came in a very general form. We had to take the supply table and make out the requisition, say for 10,000 or 20,000 men for field supply, according to the supply table.

Q. This first requisition, which bears date May 5 and which was invoiced May 12, was that supplied in full?

A. Everything that is on that requisition was supplied. In instances where the things were not supplied at the time a note is made on that paper stating they were not obtainable then, but were forwarded at a subsequent date, generally within a very few days.

Q. Can you let me take these invoices?

A. Yes, sir.

Q. These requisitions, with the indorsements upon them, indicate the amount of supplies that were sent and the dates at which they were sent, and cover—

A. The authority for sending them. Where they were sent on a telegraphic order, the telegram is here. You will find it filed with the requisition. Where the authority is a letter from the Surgeon-General's Office, you will find that here, and I think you will find the whole thing very explicit and full.

Q. That gives me the information I want, except I was hoping your papers or books would show the dates at which the various supplies were received at the other end of the line.

A. Not in but few instances.

Q. Does this bundle of requisitions that is now presented by you cover all the requisitions that you received during the summer—during the time of Camp Thomas?

A. All relating to that particular post. There are, of course, a great many other instances that I suppose you don't care about.

Q. You didn't supply Tampa with medicines?

A. Only to a limited extent. We did to some extent, but our supplies largely went to the middle West. To Atlanta we sent some things, such as orderly pouches; and to Jacksonville, Fla., we sent large supplies, and to Mobile, Ala.

Q. Have you any papers that will show at what date you were directed by the Surgeon-General, either in writing or by telegraph, to procure cots and mattresses and beds and hospital furniture of all kinds?

A. Yes, sir; I have such letters, and I think I have them here. There were orders received to purchase not only cots—here, for instance, that is the only complaint received from Comegys—in respect to nonreceipt of cots.

Q. Are these the same cots referred to in the Associated telegrams?

A. Yes, sir.

Q. He says here: "Scofield telegraphs, 'Arrived on the 8th and delivered on the 10th.'"

A. I never could understand that.

Q. And Comegys says 3 p. m. on the 15th?

A. I never could understand it. I think possibly he got mixed up on the invoice.

Q. I want to ask you why might it not have been practicable to establish at the opening of Camp Thomas a large supply depot there, in which supplies should be held in large quantities instead of being kept in a supply depot in St. Louis?

A. I think it would have been practicable, and, in fact, I think the Surgeon-General designed to do that. Perhaps his design was not carried out quite as early as it might have been. I don't know anything about that.

Q. Do you know whether any steps were taken to establish a supply depot at Camp Thomas and furnish it complete in the beginning for 50,000 men—stock it?

A. I am not informed as to whether the steps were taken in the beginning to do that.

Q. Would it not have been just as easy for you, as chief medical purveyor of the Western department, to have your office at Camp Thomas as to have had it at St. Louis?

A. Hardly. The depot at St. Louis is a very old one. It has existed since the war, and the supplies there are very immense. There was an immense stock of

goods there. It would take days to move them from one house to another, and it could not be done at an expense under \$2,000.

Q. Could you not have readily transferred, on the 5th day of May, to Chattanooga, sufficient supplies of all kinds to answer any reasonably to be expected wants of the Army or a camp of 60,000 men?

A. Well, I am not positive we could have got them ready quite as early as that.

Q. Could you have sent supplies on the 5th for 10,000 men, on the 10th for 15,000 more, and on the 25th for 30,000 more?

A. We could have sent supplies of some articles, but we could not have sent supplies of bedding. We could not have supplied cots for any possible contingency on the 5th of May. It was not apprehended there would be such an epidemic as proved to be. It was not known even in the middle of July that there was going to be such an epidemic of typhoid fever. Dealers don't keep an immense supply of cots on hand, and it would have required more provision than I at that time possessed, and at that time I had no authority to order supplies until the 27th of May, in that letter which you just read.

Q. Would it have been possible if you had had the necessary orders to have purchased within a very short time all the cots—all the hospital supplies—needed, either in the city of St. Louis or by telegraph from other cities adjacent?

A. Yes, sir; we could have furnished them certainly by early in June if we had had prompt direction. If we had had direction to make provision for them we could have gotten a great many.

Q. Could not you have purchased within ten days all the cots, all the bedsteads, all the mattresses, all the bedding, mosquito bars—in fact, everything that is required for a sick man, except food and medicine?

A. No, sir; we could not.

Q. Why?

A. The mosquito netting was not in the country.

Q. Leaving that out?

A. The mattresses which we sent were required to be standard hair mattresses. They cost \$11 and \$12 apiece. Had we been authorized to purchase cotton mattresses, felt, an inferior article of mattress, or had we been authorized to furnish bedsacks, to be filled with straw, which we used to do during the war, then we could have done it probably very well. Toward the last, at my suggestion, the Surgeon-General permitted me to have bedsacks made.

Q. Would it have been possible for you to have purchased in the markets of the United States and delivered at Camp Thomas by the 5th day of June all the hospital furniture that was needed for the hospital tentage of 6,000 men?

A. It is very difficult to say. If I had on the 21st of April, or the 24th or 25th of April, received a telegram from the Surgeon-General authorizing the purchase of a thousand cots, I think it is very possible that I might have got them. I got cots from Muskegon, Mich., and various places, but dealers don't keep those things in stock.

Q. How long would it require, think you, for the manufacturers to supply 5,000 cots?

A. It depends upon the kind of cot. If it is the standard cot, a cot which has to be made according to the standard adopted by the Surgeon-General, I think it would have taken to supply 5,000 cots possibly more than two months.

Q. Would it have been practicable for you to supply within three weeks 5,000 cots of some sort or other that would have answered the purpose of taking the men off the floor or off the ground?

A. Well, hardly; not 5,000.

Q. Is there anything peculiar in the Army standard cot—is there any reason why an ordinary cot can not be made by any ordinary furniture manufacturer?

A. No, sir; there is no reason that I know of why they can not be made. We

did not, toward the last, restrict orders to the regulation cot. We bought anything we could get. We bought woven-wire cots; we bought anything, and made every effort to get them in Chicago and other places.

Q. Was there, think you, thought to be any probability on the 1st of June that there would be any necessity for a thousand cots at Chickamauga?

A. Not the slightest.

Q. Was it or was it not intended that the division hospitals there should be movable hospitals?

A. I think it was unquestionably.

Q. That they were to be regarded as movable hospitals?

A. I should say so.

Q. How soon did you as medical purveyor of the western department, how soon were you informed that the division hospitals had practically become base hospitals?

A. I received no official information at all that such was the decision. The only reason I had to believe it was that the orders for furnishing advance outfits to regiments fell off and from the complaints made in the public prints of the great dissatisfaction arising from the departure from the old method of having regimental hospitals. I knew, of course, as anyone might know who reads newspapers, that that was the case, but I had no official information whatever.

Q. Prior to the 15th of July Dr. Hartsuff was chief medical officer at Camp Thomas?

A. Yes, sir.

Q. As such did all requisitions go through his hands subject to his approval?

A. I am of the opinion that they did.

Q. Did the requisitions of Dr. Comegys, in charge of the supply depot, require approval by Dr. Hartsuff or did he forward them directly to you by mail or telegraph?

A. At first they adhered to the method of requiring approval, but subsequently there was no approval required, and even the supply officer himself communicated with me direct that he wanted this, that, and the other.

Q. About what time was that change made?

A. I think the latter part of August.

Q. Not until then?

A. No, sir; I have that letter here.

Q. During the time that Dr. Hartsuff was the senior medical officer at Camp Thomas all requisitions for medical supplies had to go through and be approved by him?

A. Yes, sir.

Q. Were those individual requisitions from regimental officers consolidated requisitions from corps or divisions?

A. We received very few requisitions from regimental medical officers. In fact, I don't know that we received any after they reported at Camp Thomas. I think such as came were consolidated. They were largely from division hospitals. I know I was astonished, very much astonished, to hear of the scarcity of clinical thermometers, in view of the fact that we shipped immense numbers. I don't know how many; we sent a great many, and there was no reason why every surgeon should not have been supplied with clinical thermometers.

Q. Will your records show what number of thermometers were issued, and at what times?

A. Yes, sir; the abstract will show.

Q. Was there any reason in the condition of the markets of the United States, during the months of May, June, and July, why the standard articles might not have been on hand for use at the supply depot at Lytle?

A. Well, do you refer to medicines?

Q. Yes.

A. No, sir; I know of no reason why the main standard articles—for instance, we had some little difficulty in getting tricresole, which is simply a refined carbolic acid, and does not amount to very much. At first there was a little delay in getting these antiseptic dressings—first-aid packages.

Q. But they were not needed at that time?

A. No, sir.

Q. Now, a good many complaints have been made that articles such as strychnia, for instance, were not supplied and could not be gotten. Was there any reason in the conditions of the markets of the United States why strychnia should not have been had?

A. I do not know of any.

Q. So far as you know, as chief medical purveyor for the western department, all requisitions for strychnia were duly filled and the articles promptly sent?

A. Yes, sir; promptly.

Q. Was there or was there not any, so far as you have been informed, difficulties consequent upon the fact that medicines are packed in comparatively small packages, and do not constitute a full carload as shipped?

A. I do not think that that objection or that conjecture would apply to a shortage at Camp Thomas, because the Quartermaster was urged to forward with the utmost dispatch. All our supplies went down by fast freight, the freight train following the passenger trains.

Q. Do you know whether or not the contents of the cars were marked on the outside, showing that medical supplies were in the car?

A. No, sir; I can not answer that question.

Q. That would be a question for the Quartermaster's Department rather than yours?

A. Entirely so.

Q. As an officer of long service, thoroughly familiar with the conditions existing in the Army, do you or do you not think it advisable that the Medical Department should so far have control, absolute control, of transportation as to enable it to send its own supplies when it wanted to, and as it chose, without turning them over to the Quartermaster's Department?

A. I think it would in cases of emergency, perhaps, although I would not like to be very positive on that point, because my experience in St. Louis was very favorable to the efficiency of the quartermaster, Lieutenant-Colonel Smith, at that point. I think he did everything that he could to insure a prompt shipment of the supplies. I have every reason to believe so from my inquiries where they failed to reach their destination. I never in one single instance found any reason to believe there had been delay there.

Q. Did you or did you not, while in charge of the depot, during the time that Camp Thomas was occupied, receive any requisitions direct from the commanding general, or approved by the commanding general over the disapproval of the chief surgeon of the command?

A. No, sir; I have no recollection of ever having received any.

Q. Were any regular reports sent to you from the acting medical purveyor at Lytle of the amounts on hand during a definite period of time?

A. None at all.

Q. Should they have come to you or should they have been sent to the Surgeon-General, or was it not expected they should be sent at all?

A. I should say that the Surgeon-General should have been advised of the deficiencies, and I presume he was by telegraph. I rather think so, from the letters I got.

Q. Have any reports been received by you as to the deficiency of the medical

officers and stewards and all others having to do with the issuing of supplies at Camp Thomas?

A. No, sir; I have received no report of any kind at all.

Q. Either of the efficiency or inefficiency?

A. No, sir; none whatever.

Q. Do you or do you not think it advisable that the medical purveying depot should be under the control of medical officers of the Army, having no business experience except such as he gains as an officer?

A. Everything depends upon personal equation. There are some officers who are admirably qualified. They have an innate perception how to do business, and others have not.

Q. Would it or not, in your judgment, be advisable to put the whole purveying business in the hands of a nonmedical man?

A. Would you say men educated as pharmacists?

Q. Or men experienced as wholesale druggists; men who are familiar with the conditions existing in business, relating to medical supplies of all kinds?

A. I think it might be advisable, but the trouble is that our supplies not only relate to medicines, but they relate to surgical instruments. They relate to a thousand things that are used in a hospital, such as bedding, sheets, shirts, dry goods, blankets; things of that kind. A man ought to have a very general idea, ought to have a good idea of business, in order to conduct such an establishment and do it well.

Q. Would or would not an ordinarily well trained business man be able to purchase all these articles and to issue all these articles that you speak of just as well or better than a medical officer?

A. I think he ought to be.

Q. Medical officers know no more about surgical instruments until they come to use them than the business man does?

A. No.

Q. Then, so far as purchasing and issues are concerned, it could be done just as well?

A. Just as well.

Q. Is it or is it not a fact that in years gone by medical purveyors were nonmedical men?

A. The medical storekeepers. There were a class called medical storekeepers who were nonmedical men. Some of them were admirable men. One or two were admirable men, but there were others that were an absolute incubus upon the service. I think a medical storekeeper ought to be a practical chemist, or ought to understand something about the duties of a manufacturing chemist, and everything that relates to that. He can pick up the rest very easily.

Q. Is it a part of the education of the medical officers of the Army that they should be skilled in pharmacy and acquainted with pharmaceutical chemistry?

A. No, sir.

Q. Therefore they are not much better qualified for the position than anybody else?

A. Not any better than anyone else.

Q. Would you or would you not advise that a change should be made in the medical supply department in the direction indicated?

A. Well, I would hardly feel that I could answer that question without looking at it in all its bearings. Anyone, any man—for instance, yourself—you are as well able to have an opinion on that subject as I am. You have been in the Army. You know how it was during the four or five years' service, during the stirring times of the rebellion. I think everything depends upon the selection. If they would select such a man as Hummel Stevens—he was a medical storekeeper, and

an admirable man in every respect, and thoroughly equipped for his duties, but I could mention some others who were worthless.

Q. At what time and under what authority was the medical storekeeper's position abolished?

A. I think they were abolished by the bill for the reorganization of the Army which passed the 28th of June, 1866. I believe that was the date of the bill for the reorganization of the Army after the war, and provided that the office of medical storekeepers should expire with the present incumbents. I was going to say that I am also a medical disbursing officer. My business is to pay accounts that are sent to me approved from the Surgeon-General's Office; the accounts for medical attendants, for the examination of records, and for washing—laundry purposes; a great many accounts for the purchase of medical supplies made in various parts of the country—some very large accounts. I have disbursed several hundred thousand dollars during the past summer, so that if the medical storekeeper—if they reestablished the grade of medical storekeeper, I suppose he would have to be a bonded officer, in order to discharge the duties of a disbursing officer, being intrusted with large amounts of money.

Q. If he were not made a bonded officer, would it or would it not be practicable to have all these payments that you refer to made at the Surgeon-General's Office at Washington instead of any supply depot?

A. I think it might be practicable, but of course it would throw a great deal more work on the Surgeon-General's Office. I don't know any reason why it could not be done.

Q. These various papers that you present to us you make a part of your sworn testimony?

A. I do.

Q. On this examination?

A. Yes, sir.

Q. Now, you may request that such as you desire shall be returned to you at the earliest possible moment.

A. I would simply say that I would respectfully request that all letters dated Surgeon-General's Office, Washington, and all telegrams dated Surgeon-General's Office, Washington, which are submitted with these papers, may be returned to the medical supply depot at St. Louis, as they relate to the records of that office and are important for us to retain. In some instances they are the only authority we have for the large issues that were made and expenditures. They have their copies in the Surgeon-General's Office, undoubtedly.

Q. Is there anything that has not been touched upon in the examination that you want to call the attention of the commission to, or have you any suggestions to make relating to the changes in the method of securing and issuing medical supplies that, in your judgment, will be of service to the Army in time of peace, and especially in time of war?

A. No, sir; I don't know that I can make any suggestions that bear on that subject.

Q. If anything occurs to you after you leave, in the course of the next two days, that you desire to submit to the commission, will you be kind enough to put it in writing and send it to the commission in Washington, asking that it be made a part of your testimony?

A. I will. You asked me as to the approvals of Chief Surgeon Hartsuff for medical supplies used or required for the supply officer at Camp Thomas, and also to the different division hospitals. Now, I will ascertain fully and be able to give you a more explicit answer when I get back, and if you will be kind enough, substitute that, if necessary, if it is not in conformity with what I have said.

WAR DEPARTMENT,
MEDICAL SUPPLY DEPOT, U. S. A.,
St. Louis, Mo., December 24, 1898.

Dr. P. S. CONNER,

Member of the Commission of Investigation for the War Department.

DEAR DOCTOR: Relative to your inquiry yesterday, when I was a witness before you in Cincinnati, Ohio, as to how far Col. Albert Hartsuff's approval appears on requisitions from the medical supply officer at Camp Thomas, Ga., or on other requisitions from Camp Thomas, I wish to amend my answer (as stated at the time) and to answer that such approval appears on one requisition only, that from Comegys, acting medical purveyor, dated July 12.

Col. J. Van R. Hoff succeeded Hartsuff some time in August, and several requisitions have Hoff's approval before being sent to the Surgeon-General. The first of these was signed by Comegys, acting medical purveyor, August 4, approved by Hoff August 6, approved by the Surgeon-General August 9, and forwarded to this depot for issue. This requisition was to replenish stock, and probably was not urgent.

On the 3d of September instructions were issued by the Surgeon-General and sent here, authorizing issues direct to the supply officer, Camp Thomas, Ga.; Camp Hamilton, Lexington, Ky.; Knoxville, Tenn., and some other commands. without the formality of the approval of the Surgeon-General.

Large issues of medical and hospital supplies were made to the Leiter General Hospital, Camp Thomas, Chickamauga, Ga., Dr. Carter in charge, none of which are included in the list embraced in the abstract sent you. Supplies for the Sternberg General Hospital were so included, but not such as went to the Leiter General Hospital. I think the abstract embraces all the supplies sent to Camp Thomas excepting these.

Very respectfully, your obedient servant,

J. P. WRIGHT,
Colonel, Assistant Surgeon-General, U. S. Army,
In charge Medical Supply Depot.

CINCINNATI, OHIO, December 23, 1898.

TESTIMONY OF MAJ. GEORGE H. TORNEY.

Maj. GEORGE H. TORNEY, surgeon United States Army, being duly sworn, testified as follows:

By Dr. CONNER:

Q. In what duties have you been employed since the breaking out of the war with Spain?

A. At that time I was surgeon at the Military Academy at West Point, N. Y.

Q. What were your services since, and at what times?

A. On the 3d of May I was detailed by the Adjutant-General to take charge of a ship called the *Vigilancia*, which was then in New York, and she was designated as a hospital ship. Afterwards, as this ship was rejected for a hospital ship, I was detailed to investigate in regard to other ships, and finally selected one, and was detailed to command the hospital ship *Relief*, to fit her out and to take charge of her. I was also the acting medical purveyor from the middle of June until the middle of September. I was relieved from duty on the hospital ship *Relief* on the 17th of September.

Q. What were your duties in relation to the *Vigilancia*?

A. I was ordered to assume command of her. I have the telegram here. I took charge of her. I inspected her and condemned her, as she was a cattle ship. She had been selected without reference to the Medical Department at all. She was absolutely unfit for our purposes. I was then ordered to Washington to consult

with the Surgeon-General, and made this report, and was then directed to return to New York, which I did, and ordered to inspect any other ships which I might consider suitable for the purpose, and I did so. I was ordered to inspect a ship called the *Catania*, which I rejected, and then the trouble began. This ship having been rejected by me, was so reported to the War Department. I found at that time it was difficult to obtain a hospital ship, as the companies refused to charter them, but offered to sell them, making the statement it was not reasonable they should charter a ship which might be returned to them in a few days or a few months and not be available for their trade. I communicated that fact to the War Department. Under date of May 9, in reply to my request that a ship be purchased as a hospital ship, as it was almost impossible to get a suitable one in New York by charter, I received this telegram:

WASHINGTON, May 9.

GEO. H. TORNEY, *Surgeon, U. S. Army, New York:*

Your telegram to the Surgeon-General of the Army received. You can advise steamship companies that the Department will purchase no ships for hospital or transportation purposes. Judging from the applications which are being made by the owners of steamships, we will have no difficulty in securing a hospital ship under charter.

G. D. MEIKLEJOHN,
Assistant Secretary of War.

Here is an important letter which I first received, dated the 2d of May, 1898, as follows:

Maj. GEO. H. TORNEY,

Surgeon, U. S. Army, West Point, N. Y.

MY DEAR DOCTOR: I have just been informed that my request for a hospital ship is approved, and that a large steamship now in New York Harbor and suitable for our purposes will be engaged. I am likely to have positive information within twenty-four hours that she is engaged. I have decided to ask for your detail in charge of this ship, and I shall want you to proceed to New York at once on receipt of telegraphic instructions for the purpose of inspecting her and making a careful estimate as to what is needed in order to fit her up for our purposes with as little delay as possible. We do not want any expensive fixtures of any kind. The main thing will be to see how many beds can be accommodated and how they can best be placed; what kind of bedsteads we shall use and how they can be secured in the places which shall be used as wards. We shall use our hospital equipment from the supply depot in New York so far as is practicable. I shall send some one to assist Kneedler, and for the present he will have to remain as senior medical officer in charge at West Point. You may, perhaps, be able to go back and forth from West Point until such time as your ship is equipped and ready to go to sea. I intend also to have the ship serve as a medical supply depot, putting on board extra supplies for issue to troops in the field. You will have two or more assistants at the start, and I presume they will be acting assistant surgeons. If possible I will give you also a medical officer of the Army. I shall expect, as soon as you are ready, a very full report with reference to the capacity of the ship and everything necessary to fit her out for our purposes.

Very truly, yours,

GEORGE W. STERNBERG.

I received this telegram:

WASHINGTON, May 10, 1898.

Maj. G. H. TORNEY,

Surgeon U. S. Army, Army Building, New York:

Inspect steamship *Catania*, foot of Twenty-sixth street, South Brooklyn, at once, and report to Surgeon-General by wire, if suitable.

G. D. MEIKLEJOHN,
Assistant Secretary of War.

My reply was as follows:

NEW YORK, *May 11, 1898.*

Surgeon-General STERNBERG,

War Department, Washington, D. C.

SIR: As result of inspection of steamship *Catania*, report her as not suited for a hospital ship.

She is a recently reconstructed freight steamer, now being fitted for the special requirements of the Alaska trade. There is no structure on the hurricane deck except one small smoking room forward, a somewhat larger one aft, and the captain's stateroom. There are no bathing facilities, and few water-closets. The main deck, which before her reconstruction was her spar deck, and the lower deck, formerly a cargo deck, are badly lighted and badly ventilated, and would be veritable sweat boxes in the Tropics.

The very small deadlights on the lower deck are just above the load-water line, and could not be opened at sea.

There are no places suitable for an operating room, dispensary, storerooms, and no rooms and conveniences for the medical staff, and no accommodations for the men of the Hospital Corps and the convalescents.

Artificial light would be required between decks at all times. The ship is under foreign registry.

Very respectfully,

TORNEY, *Surgeon.*

This statement was made because she had been recommended by the Quartermaster's Department as a ship suitable for a hospital ship. I absolutely condemned her. This telegram was then sent:

NEW YORK, N. Y., *May 11.*

SURGEON-GENERAL UNITED STATES ARMY,

War Department, Washington, D. C.:

The Clyde Line has refused to charter the *Comanche* as a hospital ship. The only ship now available is the *John Englis*, for which charter has also been refused. It is suggested that she be secured by purchase, as she is immediately available. Price is \$550,000. All owners object to chartering their ships for hospital purposes, as they claim that such use will destroy their efficiency for future patronage as passenger ships.

TORNEY, *Surgeon.*

I went down to Washington and reported to the Surgeon-General and the Assistant Secretary of War that it was impossible to get ships as they wanted them, by charter. I think by appointment the Assistant Secretary of War came on to New York on the Sunday preceding the 17th of May, which was the 13th of May. We together inspected several ships, the *Catania*, *Comanche*, *Cherokee*, and finally the *John Englis*. The telephone was being used very freely in regard to the purchase, so there is no record of it. As no ship had been purchased on the 17th, and thirteen or fourteen days had already elapsed without anything having been done at all, I was very urgent in the matter, and sent this telegram to the Surgeon-General:

NEW YORK, *May 17, 1898.*

SURGEON-GENERAL UNITED STATES ARMY,

Washington, D. C.:

Have made another inspection of the *John Englis*, and I believe that she is immeasurably superior to the *Comanche* for use as a hospital ship, and that the difference in the cost of charter or purchase is secondary to the question of usefulness and adaptability for our purposes. The ultimate cost of the *Comanche* would be greater than the *Englis*.

TORNEY, *Surgeon.*

On the same day I sent the following letter:

NEW YORK, *May 17, 1898.*

Surg. Gen. GEO. M. STERNBERG, U. S. Army,
Washington, D. C.

DEAR GENERAL: After talking over the telephone with Colonel Bird, I have wired you my opinion of the value of the two ships *Englis* and *Comanche* for adaptability for our purposes.

In my opinion there is no comparison between them, and if you can spare the time to come over here to inspect them, I believe that you will unhesitatingly choose the *John Englis* in preference to the *Comanche*.

We can accommodate at least 200 more patients on the former than on the latter, and at the same time have more space for the machinery which we must introduce to convert her into a hospital capable of caring for a large number of sick.

The Surgeon-General of the Navy paid \$600,000 for the *Solace*, and was allowed \$400,000 for her equipment, which makes it seem strange that we should be stinted in our hospital service of much larger importance.

Very respectfully,

GEORGE H. TORNEY,
Major and Surgeon, U. S. Army.

At this time I was already preparing to introduce auxiliary machinery in the ship, and the following letter refers to it:

NEW YORK, *May 17, 1898.*

Surg. Gen. GEO. M. STERNBERG, U. S. Army,
Washington, D. C.

DEAR GENERAL: I inclose a quotation for a distilling apparatus for the hospital ship. I think that the charge is very high, but it seems impossible to get anything at a reasonable figure when in a hurry. The cost of this distiller should be paid by the Quartermaster's Department, as it may be justly considered as the water supply of the ship, if she is purchased.

I hope that Mr. Meiklejohn has selected the *John Englis* as most suitable for our purpose, as she is decidedly the best ship that I have inspected.

Very truly, yours,

GEORGE H. TORNEY,
Major and Surgeon, U. S. Army.

In saying that the Quartermaster's Department should pay for the apparatus I considered a great misfortune, for I think it caused our delay. The following is a telegram I received on May 18:

WASHINGTON, *May 18, 1898.*

Maj. G. H. TORNEY,
Surgeon, U. S. Army, Army Building, New York:

You are advised that I have this day purchased steamship *John Englis*.

G. D. MEIKLEJOHN,
Assistant Secretary of War.

Then another telegram from the Surgeon-General, as follows:

WASHINGTON, *May 18, 1898.*

Surg. G. H. TORNEY,
U. S. Army, Army Building:

The *John Englis* has been secured. Obtain estimates from several parties, if practicable, for satisfactory ice machine, steam disinfector, and steam launches, and send to me for approval steam laundry and distilling apparatus.

STERNBERG, *Surgeon-General.*

I desire to state all this matter had been gone over with the Surgeon-General. I had outlined all my plans, and everything was arranged so we could immedi-

ately procure the machinery when the ship was purchased. Now, in these letters from the Surgeon-General, some are personal and some official. Here is the one of May 20:

WASHINGTON, *May 20, 1898.*

Maj. GEORGE H. TORNEY,
*Surgeon, U. S. Army, Army Building,
New York City.*

MY DEAR DOCTOR: Your telegram of this date, asking me if I will visit the ship to arrange for necessary changes, has just been received. I hope to visit the ship later, but can not get away just at this time. You had better send in at once a statement of the changes which you consider absolutely necessary. You should be as reasonable as possible. Extensive changes, involving delay and expense, will be very disappointing to the Secretary of War, who has been led to believe that the ship could be ready for service within a very short time.

I have ordered some doctors to report to you on Monday. You will have to give them orders to report again, from time to time, as you may think best. The ship will be called the *Relief*. The Quartermaster's Department has been instructed to put in the ice plant, the disinfecting apparatus, the steam laundry, the distilling apparatus, and the steam launches. They will have upon their rolls all the men necessary to manage the ship, together with cooks and stewards for captain and crew.

What about the messing arrangements for medical officers and the cooking and supply of food to attendants and patients? You will have to consider all this. I shall try to give you all the help necessary, and it is my present intention to ask to have Dr. Gorgas detailed for duty with the *Relief*. As I have told you, I intend the ship also to serve as a supply depot, and I will send shortly a list of the supplies which I desire to have put on board of her for issue to troops in the field. As you will be responsible for all of the property for use on the ship, I think it will perhaps be best to have you also detailed as acting medical purveyor. This would save the making of another set of returns, and you could have a competent hospital steward to take charge of the issue of supplies under your orders. It will perhaps be best for you to detail Gorgas as executive officer, and he could also be your assistant in attending to the issue of supplies, without being himself responsible for them.

I hope you will expedite matters as much as possible, and shall be glad to have you write to me freely. I hope to make you a visit in the course of a week or ten days. If you find it necessary to come to Washington to consult me about "contemplated alterations," you can do so, and I will ask for orders covering your traveling expenses. You had better say nothing at present about a delay of a month in preparing the ship for service. I trust that you may be ready in less time; but if such a delay is necessary, let the Quartermaster's Department represent that fact.

Very truly, yours,

GEO. M. STERNBERG.

I would like to say that the Surgeon-General, in a conversation I had with him about this time, gave me absolute authority to issue all the stores necessary in my judgment, and made no limitation on it whatever. This is my own report about this matter—my report to General Sternberg in regard to the supplies—after I had in all bids for the auxiliary machinery. This included the ice plant, the disinfecting apparatus, distilling apparatus, steam launches, etc. At this time I was ordered to turn over these matters to the Quartermaster's Department. This bears date the 21st of May. In fact, Colonel Brown had already purchased one of the articles before it was turned over to the Quartermaster's Department. On this

date I inclosed him a list of the changes in the ship and additions which were necessary to complete her. The following is the letter I sent:

NEW YORK, May 21, 1898.

Surg. Gen. GEO. M. STERNBERG, U. S. Army,
Washington, D. C.

MY DEAR GENERAL: I have all the bids in for the ice plant, the disinfecting apparatus, the distilling apparatus, and the steam launches, but as the Quartermaster's Department is to do the work, I will turn them over to Captain Summerhayes, who will complete the contracts.

Acting on your telegram to me of approval, Colonel Brown told the laundry company to prepare to introduce their machinery, and they are getting it ready. This will not create any difficulty, as Captain Summerhayes will make the order good, but as you have the proposals in your office, I request that it be returned to me. Everything will be hurried along as rapidly as possible, and will not be delayed except by the necessity for the introduction of the ice plant.

I inclose you a list of the changes in the ship and the additions which will be necessary to complete her. All this work can be done concurrently with the introduction of the new machinery.

I will establish a mess for the officers on the model of the naval vessels, and will carry on the usual messing arrangements for the attendants and patients, but as this will be at times an enormous task—say the feeding of 500 or 600 people—I think that it would be best to detail an acting assistant quartermaster and commissary to do the issuing and transferring and to attend upon the transportation and purchase of coal and other ship's stores. I have handed to Captain Summerhayes the list of alterations necessary, and will inclose a copy if the clerk can prepare it in time for the mail. If he does not, I will forward it to-morrow. As soon as possible after the quartermaster furnishes me the list of the crew, I will notify you of the number of cooks, stewards, etc., that I will need for the patients.

Very respectfully,

GEO. H. TORNEY.

The following is a letter I received from the Surgeon-General:

WASHINGTON, May 22, 1898.

Maj. GEO. H. TORNEY,
Surgeon, U. S. Army, Army Building, New York.

DEAR DOCTOR: Your letter of May 21 has been received. I have applied for the detail of an officer as acting assistant quartermaster and commissary, and will make inquiries to-morrow as to what action has been taken. I think you had better try to secure the services of at least ten trained male nurses. You may perhaps be able to obtain them from some of the New York hospitals. You can contract with them, upon blanks which we will send you, at the rate of \$30 per month and rations. Colonel Alden suggests that you communicate with Jarvis and select from among the privates of the Hospital Corps examined by him and enlisted in New York such men as seem most desirable for duty on the hospital ship. They can go directly from recruiting rendezvous, after being outfitted, to your ship. Report the number secured. The six trained female nurses and two yellow-fever immune female nurses will be sent to report to you when you let me know that you are ready to have them go on board. I shall ask for Dr. Gorgas's orders within a few days. Let me hear from you frequently as to the progress you are making.

Very truly, yours,

GEO. M. STERNBERG.

I would like to add the hospital men were secured and trained while we were waiting. The male nurses were also secured, and everything was arranged in

that respect. On May 24 the Surgeon-General informed me that it was his intention to come to New York and inspect the ship.

Q. You have now come to the point where the ship was turned over to the Quartermaster's Department for fitting, have you?

A. The day she was purchased she was then turned over to the Quartermaster's Department.

Q. Will you be kind enough, in your own way, with or without details, to state what measures were taken by the Quartermaster's Department to fit up the ship, and how rapidly those measures were taken; whether they began the work on May 19 or shortly afterwards, or whether that work was not moved any for weeks afterwards? In other words, I want to get a history of the preparation of the ship.

A. In answer to this question I have to state that the ship was purchased on May 18. I was so advised of her purchase, and the quartermaster of New York was advised. Major Summerhayes was put in charge of her construction. As there were some defects in the machinery at the time she was purchased, she was taken to the Morgan Iron Works for the slight repairs. For that work the Government was not responsible. The actual work on the ship, which was by this time under the control of the Quartermaster's Department, was not begun until the 4th of June. It was then by the greatest good fortune placed in the hands of Naval Constructor Bowles, of the Navy, and was carried on. But up to that time no work had been done at all on that ship, in spite of all the urgent requests on my part. I stated that the changes authorized by the Quartermaster-General were simply inadequate for our purposes. The first real work, so far as preparation for the changing of the ship was concerned, was initiated by the letter of May 27, by the Morgan Iron Works, in a letter addressed to Major Summerhayes, as follows:

MORGAN IRON WORKS,
New York, May 27, 1898.

Maj. JOHN W. SUMMERHAYES,

Assistant Quartermaster, Army Building, New York City.

DEAR SIR: Since the interview with yourself and Major Torney we have made an approximate estimate of the cost of the changes proposed on the steamer *John Englis*, as shown on plan and explained by you, the items for which are given below:

- Alterations on joiner work on two passenger decks.
- Two hundred pipe-and-wire berths, as described, for 400 persons.
- Iron stringers and stanchions where required in joiner space.
- Removing sheathing and cargo battens on lower deck.
- Calking and shellacking two decks, coal bunkers, and carpenter work.
- Putting in eight water-closets, five bath tubs, wash basins, tables, etc., in operating room.
- Changing electric lights and running new wires as desired.
- Awnings and stanchions on upper deck.
- Boat davits and cradles for two steam launches, with connection to steam capstan.
- Painting ship throughout, inside and out, including bottom in dry dock and dry-dock charges.
- Four new side ports, each in three parts.
- Overhauling steam machinery.
- Installing and connecting ice machine, distiller, disinfecter, laundry, evaporator, and carbonator, and alterations in galley.
- And make the amount about \$60,000.
- We have consulted Constructor Bowles in regard to a portion of the work, have

submitted our figures to him, and they have his approval. We could not name an absolutely fixed price without a detailed specification, which might not be practicable, and would suggest that it might prove more satisfactory and insure greater dispatch to have the work done upon the plan adopted by Constructor Bowles on the vessels which he had at our works, as follows:

For all joiner and carpenter work, painting, electric lighting, and plumbing, 20 per cent advance over cost of materials and labor.

For machinists, boiler makers, steam fitters, and coppersmiths, \$3.50 per day.

For machine and boiler shop tools, 80 cents per hour.

For riggers and laborers, \$2.50 per day.

For foremen in each department, \$6 per day.

For any material or labor not mentioned above, 20 per cent advance on.

Our estimate above is based upon working regular time. Should any over time be required it would proportionately increase the cost.

Very truly, yours,

GEO. J. WEED, *President.*

[First indorsement.]

NEW YORK CITY, *May 27, 1898.*

Respectfully referred to the depot quartermaster, New York City, in connection with telegram from the Quartermaster-General of the 24th instant.

This is an only approximate estimate, a close one being impracticable, and does not include the necessary equipment, such as hawsers, etc., nor the two steam launches, or what may be needed to supply the deficiency in the galley furniture.

J. W. SUMMERHAYES,

Captain and Assistant Quartermaster, U. S. Army,

Quartermaster, U. S. Volunteers.

[Second indorsement.]

DEPOT QUARTERMASTER'S OFFICE,

New York, May 27, 1898.

Respectfully referred to Maj. G. H. Torney, surgeon, U. S. Army, New York City, with the request that he will examine this estimate and report whether it includes everything that will be necessary to fit up the boat for the purpose for which it has been purchased. If not, that he will state in detail what will be necessary in addition and the cost thereof.

A. C. KIMBALL,

Deputy Quartermaster-General, U. S. Army, Depot Quartermaster

[Third indorsement.]

NEW YORK, *May 27, 1898.*

Respectfully returned to Col. A. C. Kimball, deputy quartermaster-general, U. S. Army, depot quartermaster, New York, N. Y.

This estimate does not enumerate the fitting of davits and necessary tackles, with connections to steam capstan on both sides of the ship, for the raising and lowering of sick and wounded men to and from the decks, nor does it mention the necessary side boat landings and ladders, nor the side booms for fastening boats, nor the fitting of the officers' rooms with furniture according to Navy pattern. As these are matters of minor cost, it is probable that they were accidentally omitted from the statement, as they were entered on the memorandum of Constructor Bowles, and also that of Mr. Rowland, the representative of the Morgan Iron Works at the time the inspections were made and the required alterations suggested. It does not include the ice plant, the disinfector, the evaporator (distiller), and the laundry machinery, all of which will be purchased under separate contracts. It is urgently requested that some decision be made at an early date

regarding the alterations of the *Relief* into a suitable hospital, as she will undoubtedly be of great service if our armies invade Cuba or Porto Rico, a movement which is apparently imminent. The cost of the alterations seems to be very great, but I have been informed that it is considerable less than what was expended for the same purpose on the naval hospital ship *Solace*.

GEO. H. TORNEY,
Major and Surgeon, U. S. Army.

[Fourth indorsement.]

DEPOT QUARTERMASTER'S OFFICE,
New York City, May 27, 1898.

Respectfully forwarded to the Quartermaster-General, U. S. Army. Reference is made to telegram May 25, 1898 (Q. M. G. O., No. 110418).

A. C. KIMBALL,
Deputy Quartermaster, U. S. Army, Depot Quartermaster.

[Fifth indorsement.]

WAR DEPARTMENT,
QUARTERMASTER-GENERAL'S OFFICE,
Washington, May 30, 1898.

Respectfully returned to Lieut. Col. A. S. Kimball, depot quartermaster, Army Building, New York City.

Such work upon the hospital ship *Relief* as is incorporated in the inclosed paper is authorized, with the exception of the alterations and joiner work on two passenger decks, painting of ship inside, overhauling steam machinery; only such work to be done upon it as is absolutely necessary. The work authorized is to be done at the least possible cost to the United States, under the supervision of Major Summerhayes, according to plan adopted by Constructor Bowles, of the Navy, on the vessels which he has had repaired at the Morgan Iron Works. Major Summerhayes will find these suggestions in this letter, which he will adhere to in making the repairs on the steamer *Relief*. Work to be pushed with all possible haste. Report of cost to be made to this office.

M. I. LUDINGTON,
Quartermaster-General, U. S. Army.

Now, this is my telegram referred to in this paper, under date of June 1:

Surg. Gen. GEO. M. STERNBERG, U. S. Army,
Washington, D. C.:

The authorization for the work on the *Relief* has just been received and referred to me by Major Summerhayes. The limitations of this work as prescribed by the Quartermaster-General are such that the ship remains as she is now, a passenger ship, and under these limitations she becomes a hospital ship only in name. The prohibition of the alterations in her joiner work, which were not of reconstruction but of absolute removal in almost every instance, prevents the introduction (after authorizing their purchase) of additional water-closets and of bath tubs, which are of course absolutely necessary. It also prevents the construction of operating room, dispensary, bacteriological laboratory, the placing of desks for clerks of the different departments and the medical officers, the fitting up of the rooms for the female nurses and the officers of the medical staff, and the enlargement of the rooms for the messing of the male nurses, the help, and the men of the Hospital Corps. It allows for the purchase of 200 pipe and wire berths, and then provides but small space for their erection on the cargo deck, forcing thereby the placing of the sick and wounded patients in badly ventilated rooms, which in the Tropics will become foul, hot, and unbearable, increasing their sufferings and adding to the percentage of mortality.

From a sanitary point of view the alterations recommended in the joiner work are the most important changes that are needed in the ship to convert her into a floating hospital.

On the other hand, they would be completed before other absolutely necessary additions—for instance, the lifts for the sick and wounded—and finally they would cost less than many of the changes allowed, since nearly all the alterations would mean the removal of partitions and bulkheads, and not, except in a few instances, of any reconstruction.

TORNEY, Surgeon, U. S. Army.

On June 4 I stated to the Surgeon-General that the work on the *Relief* had at last, after much delay on the part of the Quartermaster's Department, been commenced. I told him Naval Constructor Bowles was placed in charge, even on that day, and although I had given orders for the changes to be made, there really was no authority for the action, but I urged him to go on, and he was perfectly willing to do it. Now, on June 12, there was this letter:

WASHINGTON, June 12, 1898.

Maj. GEORGE H. TORNEY,

Surgeon, U. S. Army, in Charge of Hospital Ship,

Army Building, 39 Whitehall Street, New York City, N. Y.

DEAR DR. TORNEY: The hospital ship will be required at the earliest possible moment to go to Santiago, where you are likely to have plenty of sick and wounded men awaiting your arrival. I trust that you will do everything in your power to have the ship ready for orders at the earliest possible moment. I wish to go on board and inspect the *Relief* before she sails, and a convenient time for me will be on Sunday next. You can arrange matters so as to meet me on Sunday morning at 10 o'clock, at some convenient place from which we may go to the ship. I shall probably bring Mrs. Sternberg and a young lady who is visiting us with me.

When will you doctors and nurses go on board to live?

In addition to the medical and hospital supplies which you will take to use on the ship, and for issue to troops in the field, I wish you to have an ample stock of canned goods, such as will be most useful for the division hospitals in the field.

Be sure to get everything on board as soon as possible, for when you get your orders we want no delay on the ground that certain articles for which requisition has been made are not yet on board ship.

Very truly, yours,

GEO. M. STERNBERG.

You will understand I had no charge of the construction at all. I simply indicated what I wanted. Now, in regard to the stores, I would like to state right here that the stores for the *Relief* began coming aboard about the 12th; that is, they began delivering at the dock. I was so anxious to get away I wanted to get them in the hold, so there would not be any delay at the last moment. Now, this is my letter of instructions, which is the important letter, one written June 22 and one June 27. They are as follows:

WASHINGTON, June 22, 1898.

Maj. GEORGE H. TORNEY,

Surgeon U. S. Army, Commanding U. S. Hospital Ship *Relief*,

Army Building, 39 Whitehall Street, New York, N. Y.

SIR: You will do everything in your power to expedite the work upon the hospital ship *Relief*, and when she is ready for sea report to me by telegraph. Upon receiving telegraphic orders to that effect you will proceed directly to Santiago de Cuba, reporting your arrival to the commanding general at that point. Your ship should be anchored in a safe harbor at such point as may be designated by the proper authorities, and as near as possible to the seat of active operations. You will receive on board up to the full capacity of the ship the sick and wounded of the Army and Navy, and care for them exactly as if they were in a general hospital. The *Relief* is regarded as a United States general hospital, and you will be

expected to make such reports and returns as are required by regulations for a general hospital. Your attention is especially invited to A. R. 1433, and should anyone attempt to exercise unauthorized authority over you or your ship you will invite their attention to this regulation. When, in your judgment or in that of the commanding general or the chief surgeon of the troops at whatever point you may be located, it is desirable that you should proceed to a home port for the purpose of landing the sick and wounded, you will, if practicable, communicate with me by telegraph, and orders will be sent you designating the port for which you should sail. If it is not practicable to communicate with me by telegraph, you should apply to the commanding general of the troops for orders to proceed to such home port as may seem desirable, and immediately upon your arrival you should communicate with me by telegraph in order that arrangements may be made to transfer the sick and wounded to a general hospital.

You will issue medical supplies, upon properly approved requisitions, to troops in the field, and will do everything in your power to aid the medical officers with these troops in providing for the comfort of the sick by the issue of ice, hospital stores, and such delicacies as you may have at your disposal.

When practicable, you will send to me once a week a telegraphic report showing the number of patients of the Army and of the Navy on board the hospital ship. You should make timely requisition for necessary supplies for use on the ship and for issue to the troops in the field. I shall send you \$1,000 as a hospital fund, and you are authorized to give to chief surgeons, or surgeons in charge of division hospitals, amounts not exceeding \$100 for use in the purchase of necessary articles for the sick in the field hospitals.

Very respectfully,

GEO. M. STERNBERG,
Surgeon-General, U. S. Army.

WASHINGTON, June 27, 1898.

Maj. GEO. H. TORNEY,

*Surgeon, U. S. Army, Commanding U. S. Hospital Ship Relief,
Foot of Ninth Street, East River, New York, N. Y.*

SIR: Your attention is invited to the following additional instructions:

You should keep in view the fact that the *Relief* is a well-equipped floating hospital and a depot of supplies for troops in the field. It is important, therefore, that she should not be taken away from the scene of active operations unless it is absolutely necessary for the purpose of landing the sick and wounded at a home port. You should avail yourself of every opportunity to send proper cases by the naval ambulance ship, the *Solace*, or by Army transports returning to home ports. As a rule, the more serious cases of injury and sickness should be retained on your ship, as the disturbance incident to a sea voyage would be injurious to them. Convalescents and those sick and wounded who can be transported without injury to themselves and who are not likely to be fit for duty within a short time should be sent to a home port whenever an opportunity offers.

Very respectfully,

GEO. M. STERNBERG,
Surgeon-General, U. S. Army.

Q. At what time were you ordered to sail?

A. As soon as I could get ready.

Q. What was the date of the telegraphic order that you received?

A. June 25, I think it is. On the 26th I received another telegram as follows:

WASHINGTON, June 26, 1898.

TORNEY,

*Surgeon, U. S. Hospital Ship Relief,
Foot Ninth Street, East River, Morgan Iron Works, New York:*

When ready to sail, if steam launches are not on board, report fact and delay may be authorized.

STERNBERG, *Surgeon-General.*

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Now, this is my reply to the telegram of the order to sail. I telegraphed in these words:

NEW YORK, *June 30, 1898.*

SURGEON-GENERAL, U. S. ARMY,

Washington, D. C.:

Notwithstanding every effort of Constructor Bowles and myself it will not be possible for the *Relief* to sail to-day. The work on the ship is not finished. The ice machine will not be completed until to-morrow, while the steam launches have not yet been delivered. I am using every effort to get the *Relief* away, and will assure you she will not be delayed one hour longer than is necessary. It would be useless for us to go south without the launches or completed ice machine, as the *Relief* must be self-contained when she leaves this dock.

TORNEY, *Surgeon.*

Q. At what date were you ordered by telegraph from Washington to sail?

A. July 2.

Q. At what time were you able to sail?

A. July 3.

Q. As I understand, no work was begun on the hospital ship *Relief* until the 4th of June?

A. There was work going on, but not done by the War Department.

Q. After that date was the work pushed with due diligence?

A. With every possible diligence it was urged and pushed. The men were working under the charge of Constructor Bowles, of the Navy. Fortunately, at that time the work was turned over to Constructor Bowles.

Q. At what time was the work completed?

A. It was actually completed on the 2d of July.

Q. Would it have been possible to have hastened that work during the period between the 4th of June and the 2d of July so that days might have been saved?

A. No.

Q. Were there any delays during this time consequent upon changes of plan or details of construction?

A. No.

Q. Were there any delays consequent upon the failure of contractors to furnish the necessary material that had been contracted for?

A. No. Now, I want to qualify that statement by saying that it was the misfortune that the contracts for the auxiliary machinery were not let before the work on the ship actually began. The ice-machine men required four weeks to complete their machine. The four weeks could have been commenced on the 20th day of May just as well as on the 4th day of June. The launch men required five weeks. They actually completed it in four weeks.

Q. Do you know of your own knowledge why these contracts were not, say, made on the 20th of May instead of on the 4th of June?

A. Simply the system of the War Department. I don't know. I was prepared at that time to buy them in the open market. It was this system of contracts that delayed it.

Q. Did this system of contracting necessitate advertising for bids and the securing of bids under such advertisements?

A. Yes, sir.

Q. Did this consume considerable time?

A. The letting of the contract?

Q. The advertising and receiving of bids.

A. No; the advertising itself did not, because Major Summerhayes expedited it as much as possible.

Q. Was due diligence exercised by the Quartermaster's Department in whatever

it had to do with the fitting out of the hospital ship *Relief* after the date of the 4th of June?

A. After the date of the 4th of June the Quartermaster's Department practically had nothing to do with the reconstruction of the ship. It was in the hands of Constructor Bowles, and he exercised every diligence. They worked on it some days all day and all night. We found they were not gaining much by that, as the men were so tired they could not carry on the work the next day, so they worked from 7 o'clock in the morning until 11 at night.

Q. Would it have been practicable to secure three shifts of eight hours each?

A. It could not have been done any faster than it was.

Q. Was that because the men competent to do the work were not to be found in great numbers?

A. The work was in charge of Constructor Bowles, and was being done under a hurry order by the Morgan Iron Works, and they used the whole force of their shop working on that ship, and they had a large force of 600 men working on that ship all the time. That was the limit of their capacity.

Q. On the 2d of July, when you sailed, was your ship in perfect order for the purpose?

A. Yes, sir.

Q. Would it have been practicable for you to have sailed any days in advance of the 2d of July and still had the ship in perfect order?

A. It would not.

Q. Were you delayed at any time in consequence of passengers taken on board ship?

A. I was not.

Q. Is it or not a fact, as has been stated, that unnecessary delays existed because of outside parties being taken on board that ship going south?

A. No, sir.

Q. Now, will you be kind enough to tell us at what time you arrived at Siboney?

A. I reached Siboney about 12 o'clock on July 7.

Q. Had you or had you not at that time any medical stores to land?

A. I had a whole cargo.

Q. Did you or not at that time telegraph to the chief surgeon of the expeditionary corps, Dr. Pope, that you were there with supplies?

A. I did.

Q. Did you state to him what amount of supplies you had?

A. I told him I had medical supplies for his corps. I did not know the amount I had. I knew the whole hold was full of medical supplies which had been sent to me for that army.

Q. How much of a proportion of the stores that you had to land at Siboney on the 7th of July were medicines, and how much a proportion of hospital furniture?

A. I had an immense quantity. I had on that ship at that time 750 cots. I never saw any of those stores; that is, I never saw the inside of the boxes, but there was an equipment on the ship for a 750-bed hospital on shore for a period of six months.

Q. Including medical supplies?

A. Including medical supplies, and including furniture and stores.

Q. Had you any medical supplies in addition to that which you estimate as being a six months' supply for a 750-bed hospital?

A. The ship itself was well supplied.

Q. Had you for delivery at Siboney medicines in addition to those which were on account of the 750-bed hospital supply?

A. No, that included the whole of this amount.

Q. Were all those stores landed?

A. Every one.

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Q. Is it or not probable that the medicines that you landed could be in any way expended in the course of fourteen days?

A. It does not seem probable.

Q. It has been stated to the commission that on the 8th day of July the medicines were landed, and on the 23d of July there were no medicines at the front, nor at Siboney?

A. It seems to me it is absolutely impossible that such would be the case.

Q. Was any explanation ever given to you with reference to the rapid consumption of medicines?

A. I would like to say when the medicines were placed on shore they were placed entirely beyond my control.

Q. Was any report made to you?

A. There was no reason why there should be. Nobody was required to report to me at all.

Q. Was it reported to you upon your arrival at Siboney by any of the medical officers what amount of sickness there was prevailing?

A. No, sir.

Q. Could you under the circumstances of the early delays and the necessary amount of work that had to be done in preparing, furnishing, and equipping the ship—could you by any possibility have reached Siboney at an earlier period than you did?

A. No.

Q. Do I understand you correctly that you attribute the delay in the beginning of the war to the methods and actions of the Quartermaster's Department?

A. I do.

Q. Now I want to ask you in regard to the supplies issued by you to the transport *Seneca*. Was or not the transport *Seneca* lying near you when you landed at Siboney?

A. It was not there when we went to anchor.

Q. How soon did she come near you?

A. She came down into the harbor on the 10th—8th, 9th, or 10th—but she was not there when we went in; but after being there a while she drifted, I thought deliberately, down on the *Relief* to get our anchorage and drove us out. We had to go ashore or leave the harbor. That was the status so far as the *Seneca* in relation to the *Relief* was concerned, so we had to get up anchor and go outside while she was in there. In fact, she took our whole anchorage, and anchorage was very limited at that time.

Q. At the time the *Seneca* was lying alongside or close to you had you any sick or wounded, or both, on board?

A. Yes, sir.

Q. In what number?

A. On July 12 I had 182 wounded.

Q. How long before this had you received these?

A. I commenced receiving wounded on the 8th of July.

Q. What were the instructions under which you received those wounded?

A. They are here embodied in this letter of the Surgeon-General. I received the wounded under instructions of the Surgeon-General, under letter dated June 22, and the additional instructions in his letter of June 27.

Q. I mean after you reached Siboney, at the time the wounded were sent to you, under what orders did you receive those wounded?

A. I just reported to the surgeon on shore, and to the chief surgeon of the corps, that I was ready to receive the wounded.

Q. And he, in accordance with that, or because of such notification, the number of the wounded you already stated was sent on board ship, were they?

A. Yes, sir; from day to day.

Q. Were you expecting to return north soon, or did you expect to lay there as a floating hospital?

A. My instructions were to remain there as a hospital ship. That is the instructions from the Surgeon-General first. Instructions came afterwards through General Miles.

Q. On the 12th of July were you expecting to remain as a floating hospital off Siboney, or were you expecting to come north?

A. On that day I expected to remain there.

Q. Did you or did you not transfer any of your wounded to the transport *Seneca* on that date?

A. On that date I transferred wounded to the number of 42.

Q. For what reason did you transfer these men from the hospital ship? Was it because you wanted to provide for other wounded that were expected, or was it in order that these men might be sent north as rapidly as possible, or was it because it was desirable that the men should be gotten away to relieve the pressure upon the hospital ship *Relief*?

A. In answer to your question I was going to state that on the afternoon of the 11th Colonel Greenleaf, the chief surgeon of the Army, arrived at Siboney and came aboard the *Relief*. In consultation and discussion with regard to this matter, the reception of the wounded, either that evening or the next morning, he informed me that if the Spaniards did not surrender that the line would be assaulted and the harbor probably forced, and that a large number of wounded would be thrown on our hands, in which case it would be better for us to clear out all the slightly wounded. I sent by the *Solace*, transferred to the *Solace*, naval hospital ship, which was in the harbor at the time, on the 11th or 12th, 29 men directly from the ship and 18 that were brought alongside, as they were to be brought aboard of the *Relief*. The *Solace* and the *Relief* were then near each other. They were not at anchor at all; they were at sea. On the 12th, in accordance with this agreement we had, that the slightly wounded should be transferred north, to make way for the wounded from the contemplated battle, 42 of them were transferred to the *Seneca* for the trip north. In this connection I want to state nearly all those cases were flesh wounds of ten or eleven days' duration. Nearly all of them healed. A few of them of any severity whatever, and those that were severe were sent there at the personal request of the men who desired to go north, as they did not like the idea of remaining south any longer.

Q. Was there any medical officer, so far as you know, on the *Seneca* at this time?

A. Dr. Hicks, who went down with me on the *Relief* from Fort Monroe, did come to me two days before and told me that he and Dr. Bird were going north on the *Seneca*, and she was going for the purpose of taking the wounded north; having told me that, I made the request of Colonel Humphrey to inform me when the *Seneca* would go; he told me on the 12th. Actually she didn't sail until the 14th, and informed me that I had instructions to send the men north as rapidly as possible, and that is embodied in this letter of June 27, and he did so inform me. Dr. Hicks informed me that he could take 45 patients. I told him that I could send him 45, but I actually did send him 42. I had no more to send, as I had previously transferred some to the *Solace*; and he told me he wanted some stores, and I told him he could have everything that he wanted; that all he had to do was to submit his list—to make out the requisition and submit the list to the steward—and he would be supplied with everything that he desired. This he did. He was given everything that he asked for. The matter was informal. He simply asked for what he wanted, and he got it.

Q. Was he, so far as you could judge, sufficiently supplied with medicines, with the proper food and the dressings, that would be required for the proper care of the men on board the *Seneca* going north?

A. So far as I know, he was. I, of course, had to rely upon his own knowledge of what he needed. I had nothing to do with the *Seneca*. I had no more control of the *Seneca* at that moment than you have at this moment. It was not in my jurisdiction or power. She was simply one of the means of transporting the wounded north. I have a list here of wounded that were transferred, and you will see they were nearly all flesh wounds, which had nearly all healed, and were thoroughly dressed before they left the ship.

Q. Did you or not supply him with any articles of hospital furniture that could be required by these men?

A. I think not. At any rate he was supplied with that for which he asked.

Q. Did he or not state to you that the men were without any personal equipments, knives, forks, plates, etc.?

A. I don't remember that he did.

Q. Is it or not a fact that you stated to him that he could have everything that he could possibly want, but in the condition of the cargo it was impossible to get at many of those things, but you would let him have what he would need, in your judgment?

A. I did. I remember some such conversation. I don't remember the terms of it, that he could have everything that he could possibly desire that was out on the ship, that was not in the packages intended for on shore.

Q. If he had asked that the cargo be broken, that is, the packages be opened, so that he be supplied with the necessary appliances, food supplies, medicines, dressings, and what not that might be needed by the sick on board the *Seneca*, would you have supplied them to him?

A. I would have given him everything that he wanted that we could have issued to him. There was no limitation as to quantities which I gave him at all.

Q. If, then, the *Seneca* sailed north with a very limited supply of necessary articles, and that in consequence of such limited supply the men were deprived of that which they ought to have had, where does the responsibility of this rest, with him or with you?

A. It certainly does not rest with me, because I had nothing to do with the *Seneca*. I would like to make an explanation in the passing of this matter, because I have some familiarity with ships, and I know from my observation of this matter what happened to a good many of those transports.

Q. Be kind enough to tell us anything you have to say.

A. In this case the *Seneca* took south a large number of men, say five or six hundred. She was a well-appearing ship. Better appearing than a good many of them down there. Better appearing than the *Olivette* or the *City of Washington*. She was afterwards selected to take Admiral Schley to San Juan, Porto Rico. Her cabin accommodations would have been sufficient for the sick which went from the *Relief*, and also sick from the shore, of which I knew nothing at all. They were overcrowded by the people who came from the shore. I saw them there when they were going out, and they were simply sitting up on the deck and not sick at all—reporters and others who were trying to get away from yellow fever, but that is preliminary to what I want to say. When these ships were chartered, they had a crew sufficient to man them for the traffic in which they were engaged, but after they were chartered the owners deliberately reduced their crews and left them inefficient for the service the Government demanded. They did that in almost every case. I went in one of them afterwards at Ponce. She had by that time become simply a disgusting hovel. She was dirty and filthy. If the owners of the ships had maintained them as the Government expected them to maintain them after they were chartered there would have been no trouble about the *Seneca*, because she was quite capable of carrying all the sick she brought north without any inconvenience; and so far as those that went from the *Relief* were concerned, they were all in good condition. There was no reason

why any wound should be dressed from the time they left Siboney until they got to New York hospital, and such was the idea we had, that they never would be touched.

Q. Were they in condition, think you, to be able to go on traveling rations, or should they have had proper food supplies for convalescents?

A. The majority of them were able to travel on the Government ration, because they were simply slight flesh wounds, which had entirely healed.

Q. Was it or not likely that these wounded men would become sick on the ship, having been already more or less disturbed by the climatic and local conditions existing?

A. Up to that time these men had not been disturbed by the climatic conditions. The majority were in perfectly good health.

Q. Is it not a fact that not infrequently men who are apparently well, having been exposed to conditions of this sort, do, when experiencing a change of atmospheric conditions, develop disease?

A. They do after residence of some short or long considerable periods, but these men had not been exposed in the trenches. They were shot down on the first day before they went to the trenches, or before they had been exposed.

Q. Was it a reasonable conclusion at that time on the part of the medical officers that the men would not require any special medical care or attention on their trip north?

A. It was that conclusion we reached, that the wounded men would not require any special attention, and we arranged for that result. They were dressed and prepared before they left.

Q. Did it in any way come to your knowledge why so many outside parties—employees of the Quartermaster's Department, attachés of foreign nations, newspaper correspondents, and what not—were allowed to go on board this ship?

A. No, sir. I did not know anything of it until after I saw them sailing out of the harbor. I didn't know they were there. I saw them when they went by us, and saw her upper deck—passenger deck—was crowded with people who were evidently not connected in any way with the Army.

Q. In, say, a Government transport sick and wounded are placed in any considerable number, and under the charge of a medical officer, who is the responsible officer of the ship?

A. Only on a hospital ship is the medical officer responsible. He has no control of any other ship.

Q. No matter how many wounded or how many sick?

A. Unless she is designated as a hospital ship he has no control over her whatever.

Q. She is under the control of the Quartermaster's Department?

A. Yes, sir.

Q. Under the existing circumstances, was or was not the medical officer, or were or were not the medical officers—I believe there were two—responsible for the overcrowding of the vessel and the conditions that existed?

A. No, sir; they had no control.

Q. Has he or not, under these circumstances, the right to demand, and see that the demand is complied with, that no ship shall sail until she is properly equipped?

A. I should think that would be the duty of the medical officer; but actually he has no control over that ship whatever, unless, as I say, she is designated as a hospital ship.

Q. But the question still remains whether or not he has the right, not to control the ship, but to control her moving and hold her where she is until she is properly equipped.

A. He has only the right to make the protests to the superior officer.

Q. Is it or not likely, in your opinion, that an untrained contract doctor would make protest under such circumstances, and insist through the medical authori-

ties to the military authorities that the ship should be held until she was properly victualled?

A. It would be his duty to do so; but in this instance I suppose the gentlemen saw the other ships leaving the harbor as they did. The *Breakwater*, the *City of Washington*, the *Olivette*, and some others all went north under the same conditions that the *Seneca* did, and they thought, as everybody else thought, that the ship was well provisioned.

Q. Do you know anything about the water supply of the vessel?

A. No; I do not. I had nothing to do with it.

Q. Do you know anything about it?

A. No, sir; I never boarded but one transport in my whole service.

Q. Did you put any supplies of ice, condensed milk, or proper convalescent food stuff on board that ship?

A. Dr. Hicks requisitioned for the supplies that he wanted. He handed it to the steward, and I told him to make it as full as he pleased; but I never saw it myself. I told him to hand it to the steward; not to have any formality about it, but to get what he wanted. There was no reason in the world why he should have limited that amount to anything that was within reason.

Q. Did you personally come in contact with these young contract doctors that were put on board the *Seneca* to come north with the sick?

A. Yes, sir.

Q. They were Drs. Hicks and Bird?

A. I am not certain as to Dr. Bird, but Dr. Hicks.

Q. How were you impressed with Dr. Hicks?

A. Very favorably.

Q. Did he seem to be a well-qualified, competent, and properly disposed medical officer?

A. He did.

Q. Can you say the same of Dr. Bird, of your own knowledge?

A. I can't from my own knowledge. I don't know that I came in contact with him at all.

Q. You know nothing to the contrary?

A. No, sir.

Q. Were you or not able to supply the *Seneca*, at Dr. Hicks's request, with surgical instruments?

A. I was not able to supply him with surgical instruments from the outfit of the ship.

Q. Had you any outside of the ship that you could have supplied?

A. I could not. I may have had some in the cargo.

Q. Did you at that time think it was necessary that the ship should have, from some source or other, surgical instruments?

A. No.

Q. It is not a fact at the present time wounds, as a rule, require infrequent dressing?

A. It is a fact they require infrequent dressing, and under given conditions the less dressing they have the better progress they make.

Q. Is it not an established rule at the present time, in surgical practice, that no wound should be disturbed so long as the temperature indications are favorable?

A. That is our practice.

Q. Therefore there was no necessity in these cases, most of the men being, as you have stated, far advanced toward recovery?

A. Yes, sir.

Q. And many of them with healed wounds?

A. Yes, sir. There is one question I would like to go into that has been made a special matter in regard to the number the *Relief* brought north.

Q. Will you be kind enough to state in your own way what number of patients and under what conditions patients were brought north on the *Relief*?

A. We brought north 135.

Q. You sailed from Siboney at what date?

A. On the 19th day of July.

Q. Now, will you be kind enough to tell us—

A. The first day I arrived at Siboney I was told by Dr. Guiteras that yellow fever had already occurred, and I said in discussing the matter with him, "What had we better do about this matter in regard to the ship? It came down here practically as a surgical ship, and if I get any fever cases aboard she will become infected and her utility is lost." I went around with him, and the matter was held in abeyance for some days, and on the 11th Colonel Greenleaf arrived, and on the 12th, after the matter had been gone over very carefully, he stated that he had ordered the surgical hospital there, that was La Garde hospital, abandoned, and that all the wounded from that hospital should be sent to the *Relief*, and they were so sent, as he had ordered that no more wounded cases should be sent to that hospital, but they should be sent directly from the division hospital to the *Relief*, in order that there might be no contamination at Siboney, and thereafter the *Relief* should not receive any fever cases whatever, in order to avoid any infection of the ship, and this was done. It was the positive order that the ship should not take a single fever case after the 12th day of July, and I received after that the wounded from the hospital. On that day I think I received quite a number, certainly over 70, and thereafter every day up to the day we left, the wounded from the division hospital, taking no fever cases whatever, whether they might be typhoid fever, remittent, malarial, or yellow fever. The conclusion was reached, and very justly, that if the ship once became infected the wounded could not be protected, and it was simply either to go north with a few empty beds or to put those men in danger of infection from yellow fever, and everybody supposed that this was the virulent form which was then spreading through the whole army, and that was the reason we came north with empty beds. The reason the ship did come north was that General Miles wanted her to accompany his expedition to Porto Rico, and we left Siboney for the purpose of refitting and immediately reporting to go with General Miles's army, which we did. If we had gone into New York with the yellow fever we would have been there any number of days.

Q. Did you carry away all the wounded that were in condition to be transported at the time you left?

A. We carried all of them. I transferred to Dr. La Garde all the medicines and supplies before leaving. This last part went to the yellow-fever hospital, two car-loads of supplies and delicacies and foods, on the 19th day of July, before we left.

Q. Were you able to take proper care of the wounded on your trip north?

A. We took every care of them. The *Relief* was as well equipped, so far as I could see, as any New York hospital.

Q. Were the wounded landed at Fortress Monroe or New York City?

A. New York City.

Q. Did any deaths occur on board?

A. We had deaths all the way. Every day we had a death, I think. One occurred on the night of the day we left Siboney, one occurred on the 21st, and one occurred on the 25th, the day we got into New York. These were mostly—in fact, I think all of them were spinal cases, with paralysis of the lower extremities, and relaxation of the sphincter, and the frightful symptoms which come from those cases.

Q. After the discharge of your wounded patients how soon did you proceed to Porto Rico?

A. We left New York on the 3d of August. We got into New York on the 26th of July. It was impossible to get away any sooner, because the capstan had

broken and we had to replace it by a new casting, and by one of those queer things they sent the wrong casting, and we had to wait two days.

Q. You took to Porto Rico a full supply of medicines for issue to the troops at Porto Rico?

A. I took a full supply for a 1,250-bed hospital complete.

Q. These supplies were landed at Porto Rico at what date?

A. At Ponce. The landing commenced on the 8th day of August.

Q. And was completed with much rapidity?

A. Yes, sir; we completed it very rapidly, because we had a harbor.

Q. Did you or not, on your return trip, bring sick or wounded?

A. We brought 20 wounded from Porto Rico. The rest were fever cases, mostly typhoid. It was really the hardest trip I ever had in my life. One hundred and fifty-four acute cases of typhoid fever, absolutely acute, in the very worst stage, and about 75 cases that were not so bad.

Q. Under whose orders were men in this condition sent from Porto Rico north?

A. Under the orders of the chief surgeon of the department and Surgeon-General.

Q. The chief surgeon of the department was who?

A. Colonel Greenleaf.

Q. Was there any military necessity of sending men in this condition away from where they were?

A. I thought it was an advantage for them to get on the *Relief* in order that they might receive the proper care, because the hospitals at Porto Rico were beginning to be very much overcrowded.

Q. So, it being a choice of evils, you considered the transfer the lesser of the two?

A. I thought it was best. That is my opinion. We could care for them better than almost any other organization in the Army.

Q. Were the necessary conditions that attach to sea travel seriously detrimental to the best interests of typhoid patients?

A. Not in that instance. In fact we were so favored with good weather I don't think we rolled 15° at any one time.

Q. While you were at Porto Rico did you have occasion to visit any of the hospitals?

A. I visited one, the detention hospital at Ponce, a Spanish hospital which had been captured from the Spanish forces.

Q. Was it properly equipped?

A. It was a large, commodious building, still containing cots which the Spaniards had abandoned.

Q. Were the cots in such condition as to warrant their being used?

A. Yes, sir.

Q. Was the hospital supplied with what was necessary for the care of the sick?

A. They had quite an equipment there.

Q. As you observed it, were those sick men being properly cared for?

A. They were caring for them very well.

Q. Was there or not provided for them the proper food stuffs, milk, ice, and what not?

A. I didn't go into the inspection of the mess and cooking of that hospital.

Q. So far as you know, was there or not sufficient quantity of medical supplies of all sorts at Ponce at that time?

A. There must have been, because they were easily procurable. Drug stores were there.

Q. Do you know whether or not there was in the hands of the commissary department or the medical department such articles of diet as the sick required?

A. They seemed to have everything in the commissary department. The dock

was full of commissary stores, and where we landed, on the same dock, there were sacks of commissary stores.

Q. Was there any request made of you for proper hospital food supplies, or if there had been, could you have supplied it?

A. I did supply one hospital there—Chandley's Hospital. I think I gave them large quantities of supplies that they wanted, and I sent some other things to the other hospital, but they didn't make any request, because I was all the time sending the stuff ashore which had been supplied by the Surgeon-General. They had an immense quantity of hospital stores.

Q. Do you know whether it was possible to procure milk on the island or at Ponce?

A. Plenty. I could have bought any quantity of it.

Q. How was it as respects ice?

A. They had an ice machine at Ponce which didn't amount to much.

Q. What was the capacity of your own ice plant?

A. We could actually make 2,000 pounds in twenty-four hours and refrigerate our refrigerating room.

Q. Did that permit of your distributing much ice at any points?

A. Every day that I was at Siboney I sent ice ashore to the fever hospital. All we could spare we sent to the hospital.

Q. Have you any further statements to make to the commission with reference to the conditions that you observed, either on your own ship or elsewhere, that would be of interest to us in determining how the war was carried on?

A. I don't know that I have. You see, I didn't come into contact with the camp or affairs of that kind, so I only know by hearsay. For myself I want to say, in fitting out the ship, General Sternberg gave me absolute carte blanche as to her equipment. He was anxious at all times to do everything in the world, so that the sick and wounded could be properly cared for, and he allowed me to do everything I could to that end.

Q. You spoke of having received moneys from him at different times. What amount of money was received by you from the Surgeon-General?

A. I think I received about \$3,000 or \$3,200. About \$2,200 or \$2,300 was contributed by the National Woman's War Relief Association for the purpose of a carbonating plant, so I could have plenty of mineral water for the sick. I started that scheme, and this association gave me that money for that plant. Afterwards they gave me a lot of fans and covered the electric lights with green shades, and did everything which was agreeable to the sick, and besides that there were other contributions of stores, one from my friend, Dr. Polk, of New York, and Miss Cain and Miss School. A good many of my personal friends contributed largely to the ship.

Q. You spoke of the carbonating plant. Did it work satisfactorily?

A. Very.

Q. Can you state what the actual cost of the fitting out of the hospital ship *Relief* was aside from its purchase money?

A. I think it was about \$118,000; that is, independent of the auxiliary machinery. That was for the reconstruction. I don't know, because that is what the assistant naval constructor told me. It was only approximate. The auxiliary machinery—I should say that the ice machine cost about \$6,500 or \$7,000; the disinfector cost \$1,300 or \$1,400; the laundry cost about \$1,250. The carbonating apparatus, before we were through with it, because the Woman's National War Relief Association added more to it, cost about \$2,200 or \$2,300; that is, in addition to the cost of the ship. Besides, the distilling apparatus—there were two sets of distilling apparatus—the distilling apparatus cost, I think, about \$1,500. I introduced a new kind of distilling apparatus to the ship in order that we might have the purest kind of water and at the same time aerated water.

Q. Did that work satisfactory?

A. Perfectly. In fact, before we got through we had to supply the engine with water from the distilling apparatus.

Q. Were you promptly and fully and satisfactorily supplied from the medical supply depot in New York?

A. Everything. There was not one single thing refused. Everything was furnished promptly.

Q. There never was any unusual or unnecessary delay in supplying it?

A. Not at all.

Q. Were you at any time advised to content yourself with a less perfect ship and get out?

A. No; the Surgeon-General left it to me entirely. I don't think I would have gone unless I had the ship complete when she left the harbor.

Q. It has been frequently said that if the hospital ship *Relief* could have been at Siboney even a week before it was a great deal of want would not have existed that did exist.

A. As a matter of fact, the accommodations of the hospital ship *Relief* were limited. Of course we could have overcrowded her with any number. That I absolutely refused to do because we could not have accommodated them without disaster to some. We had accommodations for 250 sick. I thought when we started out we certainly could accommodate more, but the bed spacing and the absolute necessity for making spaces between the beds was so necessary that we had to enlarge that alleyway to allow two men to go through carrying stretchers. That reduced our number and we never could take, with any satisfaction, any more than 250, although we did from Montauk to Boston carry a few more—I don't know how many more—and we carried a few more from Montauk to Philadelphia, but we never had accommodations for more than 250. The feeding, of course, was the problem of the ship. It was not the care of the sick at all, because I had the most competent staff any man in the world ever did have, and so far as the care of the sick and wounded was concerned everything went on perfectly; but feeding 250 and the hospital corps attendants and in the galley was a serious problem.

Q. Were you able to work out the problem?

A. We worked it out. It was not any work that didn't cost worryment, I assure you.

Q. Then we are to understand finally that the ship didn't get to Siboney any sooner than she did because of apparently unnecessary delay in beginning the work of fitting her up?

A. That is what I concluded. The Medical Department was absolutely ready with its work long before the ship was completed, and that delay was caused in the beginning and not in the end.

Q. Do you or not know how much of the delay in the acceptance of the *John Englis* was consequent upon necessary delay in the action of the Assistant Secretary of War, who had charge of the matter?

A. That was a matter I had nothing to do with. I could only accept the conditions as they existed. There were other ships that might have been bought. I would have bought a larger one if I could. I naturally think the *Relief* is the best hospital ship that was ever turned out, but, all the same, I would have gotten a larger one if I could.

Q. Was any explanation ever given, either officially or otherwise, to you of the delay in the Quartermaster's Department in beginning the work?

A. Well, it was, as you will see in that paper—it was a question of expense. The Quartermaster's Department in Washington thought that the work on the *Relief* ought to cost \$15,000. I thought it would cost about \$60,000. It actually cost \$118,000. Of course I had no technical knowledge of the cost of construction

or reconstruction, and, very properly, it was put in the hands of Mr. Bowles, of the Navy, and I was so glad, for the first night in two weeks I got a good, nice sleep when he did take charge of her.

Q. Have you or not any hesitancy in placing the responsibility for the delay in the acceptance and equipment of that ship upon the Quartermaster's Department?

A. None at all.

WASHINGTON, D. C., *December 28, 1898.*

TESTIMONY OF SERGT. WILLIAM W. HILL.

Sergt. WILLIAM W. HILL, being duly sworn, testified as follows:

By Colonel DENBY:

Q. State your name and residence.

A. William W. Hill, Washington, D. C.

Q. Were you in the Army in the recent war?

A. Yes, sir.

Q. In what positions?

A. I was successively corporal, quartermaster-sergeant, and first sergeant of Company L, First District Volunteers.

Q. You went in about the 12th of May, 1898?

A. Yes, sir.

Q. And you remained in how long?

A. I remained until the 26th of September; was specially discharged.

Q. You were mustered out here in Washington?

A. Yes, sir.

Q. Where did you first go, Mr. Hill?

A. First went to Camp Alger.

Q. And from there?

A. To Camp Thomas.

Q. And from there?

A. From there to Tampa.

Q. And from there?

A. To Cuba.

Q. How did you get back to the United States?

A. Came back on the transport *Hudson*.

Q. And when did you arrive at Wikoff?

A. August 27.

Q. How was your health?

A. Perfectly good. It was perfectly good the whole time I was in the service excepting one or two days' sickness at Tampa.

Q. Then you performed your duties as first sergeant all the time?

A. Not all the time as first sergeant. I was acting quartermaster-sergeant most of the time.

Q. Do you remember when you first acted as quartermaster-sergeant?

A. I was acting quartermaster-sergeant from the 30th day of May.

Q. And after that time you discharged all the duties of commissary-sergeant?

A. Yes, sir. The quartermaster-sergeant was almost continuously sick.

Q. Then you had considerable opportunity of learning all about the men and supplies and everything else, Mr. Hill?

A. Yes, sir; I did.

Q. Then will you tell us while you were in Cuba how your company was supplied?

A. It was supplied moderately well the whole time I was there. The only deprivation we felt was fresh meat at first and then salt.

Q. You were short of salt in Cuba?

A. Yes, sir; we were very short of salt in Cuba and on the transports.

Q. Where did you land in Cuba?

A. At Siboney.

Q. Do you recollect anything else you were short of?

A. No, sir.

Q. How many days' rations did you take with you when you landed at Siboney?

A. We landed a remnant of five days' rations, I think.

Q. Why do you call it a remnant?

A. Because we had eaten a portion on the ship and we took what was left. We landed, and I was left with a guard to protect these rations until the company should send back a larger detail.

Q. You were left at Siboney?

A. Yes, sir; while the company marched up into the country.

Q. How many men had you with you?

A. Six at first; and then they sent 21 men to colporteur the rations to Las Guasimas, the first camping ground. We did not get there until the morning of the 11th, at 3 o'clock, and we left at 5.

Q. How did that affect your supplies and provisions?

A. We had to abandon more than half of them at Siboney. We gave them to the reconcentrados and Rough Riders, and the remainder of them we left there. We loaded all we could on the backs of the men, but we had to abandon most of our provisions; and finally we had to abandon what we carried up to camp, leaving it in charge of a colored man and one sick man; and when we marched out of camp the Cubans and reconcentrados took nearly everything we had—all we could not carry.

Q. You lost all your provisions because you abandoned them and threw them away as too heavy to carry?

A. Yes, sir.

Q. What was the result of that?

A. The result was that when we got to the firing line we had only a little food left in our haversacks.

Q. When did you get on the firing line?

A. The morning of the 11th.

Q. Eleventh of July?

A. Yes, sir.

Q. You account for this deficiency of rations in what way?

A. Solely due to lack of transportation from Siboney to the firing line.

Q. How far was that?

A. Fifteen miles.

Q. The men threw part away; they had plenty; is that it?

A. Part thrown away and part abandoned by order of the major of our battalion.

Q. How many days was your company short of provisions?

A. From the morning of the 11th, the time we reached the firing line, until supper time of the 12th.

Q. Two days, then?

A. Practically.

Q. How did you get on during those two days?

A. We carried a few crackers in our haversacks.

Q. Any great suffering?

A. Not much; no great complaint.

Q. Taking out those two days in which you did not have full rations, how was it the balance of the time?

A. The balance of the time it was all right, as soon as the pack trains came up

from Siboney. The next evening the pack trains came in, and we got bacon, canned beef, coffee, and sugar.

Q. What was the character of those articles as to their condition?

A. I never found any fault with them, except the crackers were sometimes spoiled by being damp. There was no way to protect them.

Q. That was what kind of water?

A. Rain water. They would be protected as much as possible, but they could not keep long after getting damp.

Q. How was the bacon?

A. Good.

Q. And the coffee?

A. Good.

Q. Was it green?

A. It was roasted.

Q. Did you have to grind it?

A. We pounded it in ammunition boxes sufficient to make coffee.

Q. Now, when you say "canned beef," do you mean canned fresh beef or corned beef?

A. I call it roast fresh beef. It appeared to be beef that had been boiled and then put into cans just after it had been boiled; and the first beef we got after we reached Cuba was very dry and lean; there was no fat or suet in it. The can of meat when opened would be dark and lean. The meat we got later was an infinitely superior article. It was full of fat and moisture, so you could make a stew; but the first beef seemed to have very little nutriment in it. It was dry, hard, and lean.

Q. It had been boiled?

A. Appeared to be. We got fresh beef after we got back from the firing line. The first day we got it was after getting off guard duty.

Q. How was that canned beef?

A. It was perfectly fit to eat, but it did not appear to have the nutriment that the other beef had.

Q. Was any spoiled?

A. Some of it.

Q. What did you do when you found some that was spoiled—a can that was spoiled?

A. We took it to the commissary, and he gave us bacon or something else in its place; and if he did not have anything that day he would make it good on the next ration.

Q. Now, how many of these cans did you find defective or spoiled?

A. I don't think they averaged one out of two dozen.

Q. And how long did that last, that drawing of this canned meat and the meat sometimes being bad?

A. That only lasted until shortly after the surrender, when we moved back from the firing line to our camp.

Q. Up to the 17th of July?

A. Yes, sir.

Q. After that you got fresh meat?

A. Yes, sir; but we did not eat it very often.

Q. Why not?

A. The surgeons, brigade surgeon and regimental surgeon, would not let us eat it; the surgeons and the commissariat condemned it; the surgeons would not let us eat it.

Q. Did the surgeons condemn the canned beef?

A. No, sir. I know some was condemned at Tampa before we left.

Q. Why?

A. Because it was spoiled.

Q. It was in an hermetically sealed can?

A. Yes, sir.

Q. How did it spoil, then?

A. I don't know, but it was spoiled.

Q. Do you know anything about this canned beef being treated chemically?

A. No, sir; it had a perfectly natural smell.

Q. What would you say as to its being treated chemically?

A. None that we came into contact with was that way.

Q. Anything done in the preparation that you could see except the boiling?

A. That appeared to be all.

Q. The soldiers did not regard the canned meat as palatable?

A. They seemed at first to like it, but they got a surfeit of it afterwards.

Q. It sustained life?

A. Yes, sir; no doubt about that.

Q. What use would the soldiers make of it?

A. They mixed it with crackers and made a stew, and they made a kind of omelet also with the juice of the meat and the crackers.

Q. Whose business was it to open this canned meat?

A. Opened by the cook under my supervision.

Q. You inspected every can as it was served out to the cooks?

A. Yes, sir.

Q. And that was part of your duty?

A. Yes, sir.

Q. And what did you do when you found a can was bad?

A. Took it to the commissary and got something else, or else a credit.

Q. And very few, you say, were bad?

A. One out of two dozen or three dozen.

Q. Did those that were bad smell?

A. Yes, sir; sometimes.

Q. Did you ever use any of that canned beef in your family?

A. No, sir. I have seen it in stores in Washington, and I bought a can to remind me of old times.

Q. What marches did you make in Cuba?

A. These were the only marches of any kind—from Siboney to the firing line and a subsequent march from the firing line to Guasimas to get the tentage etc.

Q. What was the distance from Las Guasimas to the firing line?

A. Eleven or 12 miles.

Q. What kind of weather did you have on that march?

A. Rain.

Q. Did it rain much there?

A. Rained every day nearly.

Q. You say you went to the firing line. Were you in the engagement?

A. There was only the artillery engaged when we got there. There was a good deal of stray shooting from sharpshooters.

Q. When you say the "firing line" you mean where there had been a fight?

A. Yes, sir; we took the extreme right of the line.

Q. From the firing line where did you go?

A. About $2\frac{1}{2}$ miles back to San Juan Hill, and we stayed there until the 19th of August.

Q. On the 17th of July the surrender took place?

A. Yes, sir.

Q. Did you hear any complaint as to food, etc., while you were there?

A. There was the usual complaining that comes from those men who complain about everything. They complain wherever they are; they complained at Tampa, at Camp Alger, at Camp Thomas, and wherever they went; they would no sooner get to one place than they wanted to get to another.

Q. What grounds had they for complaining of what they ate at Tampa?

A. None in the world.

Q. How did they live at Tampa?

A. Better than many of them have since.

Q. You mean you lived well?

A. Yes, sir; we had a good table and good cooks.

Q. Did you have anything to drink?

A. Nothing but lemonade.

Q. How did you get that?

A. We had such a surplus of fresh beef that we sold a good deal to the contractor and bought hams, vegetables, and lemons; and we had a barrel of good lemonade on hand constantly.

Q. Was that a good or a bad thing?

A. I think it conserved the health of the company better than anything we had.

Q. What was the health of your company at Tampa?

A. It was very good. The regimental hospital never had more than two or three men in it.

Q. Do you mean that for the regiment or for the company?

A. The regiment. The health of the regiment was extraordinarily good.

Q. After you got to Cuba did your regiment become sickly?

A. Yes, sir. Up to the surrender they were tolerably healthy, but we had no more than got back of the firing line than they began to fall over.

Q. How did you account for that?

A. The water and climate, I think.

Q. Where did you get your water?

A. In a creek, and for a time the Spaniards were bathing just above us.

Q. Do you mean the enemy or prisoners?

A. Prisoners; they were on the same creek at the same time.

Q. Did you have plenty of medicines?

A. Yes, sir.

Q. Did the men take the medicines willingly?

A. After we moved back from the front to San Juan Hill, the surgeon would give me or the other sergeant a large bottle of quinine pills—I suppose it held half a pint—and he wanted each man to take two pills each night, and we had orders to see that they actually took them; and we saw that they put them in their mouths, but we could not tell what they did with them then; and they would wait until we were gone and then spit them out. They had some foolish prejudice against quinine, thinking it would make the bones soft, or something of that kind.

Q. Where was that kept?

A. In my tent.

Q. How often did you go around with it?

A. Every night and morning.

Q. Would the men make objections to you personally about it?

A. Yes, sir; some would not take it, and others had medicines of their own. They did not want to take quinine, and that is all there was about it.

Q. Did you notice how that failure to take medicine affected any of the men?

A. One died coming back on the ship, and I think that was the cause of his death. He gradually succumbed to the fever until he got on the ship; he died the second day out; his name was William MacDonald, the artificer of our company.

Q. How did the men conduct themselves with reference to other things?

A. Well, many of them would not boil the water or go to the sinks, as it was too much trouble to come up the hill again, and so they got themselves into that congested state by refusing to take medicine or any kind of purgatives.

Q. Had you been in the Army before, Mr. Hill?

A. Yes, sir; I had been in the Marine Corps.

Q. Now, I would like to ask if you found the same care and attention paid by volunteer officers as you did in the regular service?

A. With few exceptions the officers did not seem to apprehend the care of men. I suppose they did the best they could, but they simply did not know.

Q. Then what is your opinion of the effect on the health of the men of these irregularities?

A. I think the men suffered on account of the ignorance of the volunteer officers, in not knowing what to do to enforce regulations among them. I think they did the best they could, but they were ignorant of what was wanted.

Q. You think a great deal depends upon the skill and experience and care of the officers?

A. No doubt of it; and of the noncommissioned officers especially.

Q. Did you have a school in your regiment?

A. Only a purely technical school on military subjects and the manual. We had no time to drill them on quartermaster's or commissary's work.

Q. Did you have any instruction on quartermaster's and commissary's work?

A. None, excepting inquiries made to the regimental quartermaster.

Q. Did you have a school for noncommissioned officers?

A. Yes, sir; it was held daily; but it had reference only to military evolutions.

Q. It had no reference to your duties as quartermaster or commissary sergeant?

A. No, sir.

Q. Were you quartermaster or commissary sergeant?

A. I was both acting quartermaster-sergeant and also company clerk. Each company has a quartermaster-sergeant, who is excused from all duties in order to permit him to attend to those things. The care of the company commissary is a portion of his duty.

Q. Mr. Hill, how did you find Camp Wikoff when you got there?

A. We were very much impressed by the camp when we got there. It was beautifully laid out; tents were prepared for us, with the floors boarded, but we would rather have laid on the ground. I never saw such a superabundance of stuff and universal waste of stuff as there was there.

Q. You had your rations there?

A. Yes, sir.

Q. What else?

A. Everything on earth that you could conceive of that a man did not want, besides the things he did want. They had all kinds of canned goods, fancy articles, soap, and perfumery, and pens and ink and stationery, and pins and needles, and some dressing gowns.

By General McCook:

Q. Mr. Hill, did you see any freckle lotions?

A. No, sir; but I saw toothbrushes there, and the only use men made of them was to stick them in their hats and carry them around.

By Colonel DENBY:

Q. How about envelopes and pencils and stamps?

A. Plenty of them.

Q. And everything to eat?

A. Yes, sir. As I said, I never saw such an abundance of food wasted and thrown away and burned.

Q. How about newspapers?

A. I think that was the chief trouble. Many of the men did not know what was the matter with them until the newspapers told them.

Q. Will you tell us what effect that quantity and mixture of foods had upon the men?

A. It was calculated, in my opinion, to make a well man sick and kill a sick man. They mixed all kinds of food, and I have seen a man sitting down between two cans and eating from them at the same time, one containing canned peaches and the other canned halibut.

Q. How did they get these?

A. By the relief societies. Our commissary was supplied with every necessary thing at once after reaching there; but the more delicate things were brought around by civilians and thrown into the tents.

Q. Did you get any wine and whisky?

A. Yes, sir; they had wine and whisky.

Q. Any beer?

A. No beer.

Q. What do you think of that way of feeding soldiers?

A. I am not a medical man, but it is a wonder to me that many more did not die than did.

Q. From Montauk you came to Washington?

A. Yes, sir.

Q. Mr. Hill, tell us all you know that might occur to you about First Sergt. Henry Dobson—you were acquainted with him?

A. I knew him; he was the first sergeant of Company D, a company adjacent to ours. I knew him very well; not personally, but from seeing him. I took particular notice of him in Cuba, as he was in command of the advance guard of which I was a member that went back from the firing line to Las Guasimas, which was an exhausting march. I knew something of his characteristics. He was a very nervous, high-strung, enthusiastic, ambitious fellow. He was a candidate, I think, for second lieutenant, and would have gotten it but for something in his disposition at Tampa which caused him to fail at that time. He was perfectly well and apparently healthy until we got ready to go home from Cuba. Then he was taken sick, and his sickness, as with the rest, was intermittent, recurring fever. He came to Montauk and got sicker and weaker as he went along, and they tried to get him to the hospital, but he had an ambition to remain with the company and march up the "Avenue" in Washington, and he did not want to go to the hospital. He had his own medicines. His character was that of an ambitious and obstinate man, and the surgeon did not want to offend him, as he was a very good soldier. I think Dr. Cox gave way to him more than he should by permitting him to remain in the camp as long as he did. I knew he did not want to go to the hospital; his intention was to try and "tough it out" until he got here to Washington. Finally they did get him in the hospital. I know he had every care and attention a man could have up to that time, and I think if he had been a little more subservient he would have saved his own life.

Q. In your trip from Cuba to Montauk how were you provided?

A. Very well, only we had no facilities for cooking on the boat when we wanted to have coffee.

Q. What boat were you on?

A. *Hudson*. We did afterwards manage to make soup out of this superior canned beef, and we made soup every day in those large kettles they have on ships for making coffee.

Q. How many men did you have on board?

A. Two battalions and a band—I suppose about 650.

Q. How was the health of the troops on that ship?

A. I suppose 20 per cent were sick. Perhaps more.

Q. When they started?

A. Yes, sir; some had to be helped aboard.

Q. Any surgeons aboard?

A. Yes, sir; the assistant surgeon of the regiment and Dr. Ebert, contract surgeon.

Q. Did they have medicines?

A. Yes, sir.

Q. How did they do their duties?

A. They were up day and night, and were fagged out.

Q. Then what complaints have you to make of that trip?

A. None; I haven't any.

Q. Then you have no complaint, you said, to make about Montauk?

A. No, sir.

Q. Did you ever have any refrigerated beef served to you in Cuba?

A. Yes, sir; they would bring it in the early morning, and they would come in a rush as hard as they could or it would spoil before it got there. We had to bring it from Santiago.

By Dr. CONNER:

Q. Did you see enough of this refrigerated beef to have an opinion upon the length of time such beef would keep in Cuba by simply protecting it with a tarpaulin from the direct rays of the sun?

A. No, sir; I could not tell you. We had no ways of protecting it in such a manner. All we had to do was to get it into the pots as soon as possible to keep it from spoiling before the chill left the meat.

Q. Is it your opinion that beef so protected with tarpaulins would keep seventy-two hours?

A. In its raw state?

Q. Yes, sir; just as it came from the ship?

A. No, sir; I don't believe it was possible.

By Colonel DENBY:

Q. Do you know whether any of that beef was treated chemically?

A. No, sir; it was not.

Q. You are sure about that?

A. Yes, sir.

Q. And you used it?

A. Whenever they would let us. Some of the men made themselves sick on the first occasion, which probably caused the prejudice against this beef. That was on coming in from the guard, where we had been detailed for forty-eight hours as part of the cordon between the Cubans and Spaniards. There were about 11,000 Spanish prisoners there, and we formed a cordon to keep the Spaniards from Santiago and to keep the Cubans from getting to the Spaniards. We were there forty-eight hours and we were short of provisions for the last six hours. When we reached camp that time the men were so ravenous for the fresh beef that several made themselves sick from eating it half cooked: some ate it even raw.

Q. It gave them diarrhea?

A. Yes, sir; but more of them had dysentery. It was not the quality but the inordinate quantity they ate on that occasion, in addition to its half-cooked condition, that made them sick.

By General McCook:

Q. Did you have any encounters with the sharpshooters there, Mr. Hill?

A. No, sir; we heard some bullets, but we did not know who fired them. We saw evidences of shooting, but we did not see any action.

By Colonel DENBY:

Q. How many men of your company died?

A. Only one man from the time we left Washington until we came back.

Q. Who was that?

A. The man I spoke of who died on the ship; he was buried at sea on the 22d of August.

WASHINGTON, D. C., *January 4, 1899.*

TESTIMONY OF MAJ. GEORGE H. HOPKINS.

Maj. GEORGE H. HOPKINS, being duly sworn, testified as follows:

By General BEAVER:

Q. Major, will you please give us your name and rank and present position?

A. George H. Hopkins; major and assistant adjutant-general, United States Volunteers; on duty at the office of the Secretary of War.

Q. What, if anything, Major, have you had to do with the examination of the various camps occupied by our troops at different times and with the selection of sites for new camps?

A. About the first week in June, I think it was, I was one of a board ordered to Columbia, S. C.; Augusta, Ga.; at Charleston and Somerville, S. C.; Savannah and Brunswick, Ga.; Fernandina, Jacksonville, and Miami, Fla., with a view to ascertaining suitable camp grounds for troops, since which time I have visited various camps; nearly all of them, I think.

Q. Were you accompanied in these visits or inspections by any other officer; and, if so, by whom?

A. On this first trip the board consisted of Colonel Greenleaf, assistant surgeon-general; Lieutenant Jadwin, Corps of Engineers; Major Hodgson, quartermaster, and myself.

Q. Were your views in regard to the camps visited embodied in a report?

A. They were, sir.

Q. To whom was that report sent?

A. To the Adjutant-General.

Q. Presumably it is on file in his office.

A. I presume so; I have not seen it since.

Q. Are you personally acquainted with the contents of that report?

A. Well, I haven't seen it since about that time; but I have a general knowledge of it.

Q. You joined in the report?

A. Yes, sir; I joined in the report.

Q. The contents of that report are correct and true, according to your best knowledge and belief?

A. Yes, sir. These, as you understand, were proposed camp sites and troops were not there, except at Jacksonville, where there were a few.

Q. Were any troops at Miami?

A. There were not, sir.

Q. None had been sent there?

A. None had been sent there.

Q. What was the character of Miami as a camping site?

A. Well, as near as I can recollect what the report said, it was to this effect—we examined what was known as "The Prairie," which is about a mile or a mile

and a half from the town, a level tract half a mile wide and a mile and a half or 2 miles in length. It was a meadow.

By Captain HOWELL:

Q. Was that where they later came?

A. I do not know just where the troops were located. The report, I think, shows that we recommended that as a drill ground in dry weather, but hardly suitable as a camp ground, as the water was so near the surface. But it was shown to us by the citizens. Then they showed us a place just east of the station, which was covered to a large extent with a lot of underbrush and scrubby undergrowth peculiar to that section, and a force of 50 or 100 men were cleaning it off; the committee stating that they were cleaning it off and would clean as much as possible. The ground was a coral formation covered with sandy loam, and the rocks were protruding through it. The surface water there was 10 to 15 feet below the surface. A good portion of the water supplied to the town came from surface wells; the balance of the water came from the Everglades, which was brought in pipes, they told us, 9 miles. That water, they said, was used in the hotels there. The engineer officer looking after the water supply said that would not be sufficient, and they would have to depend upon well water, which the board did not think would do. The facilities there for handling troops were one railroad and limited sidings, but the railroad officials said they would put in more. There were no warehouses available, but the committee assured us they would put them up if the troops were located there. The depth of the water there was 12 feet—

Q. That is, 12 feet in the harbor?

A. Yes, sir; and also in a cut or canal 60 feet wide made out to a larger body of water. They took us in a launch along this canal, which was 2 miles long; buoys showed the depth of the water to be 12 feet, although we did not measure it. The conclusion of the report and the judgment of the board was, if it was thought advisable to use Miami as a debarkation point, that a small body of 5,000 men could be accommodated there from time to time; but it would not be advisable to locate a large body of troops there unless it became an absolute military necessity. The board was impressed with the fact that in case yellow fever broke out it could be easily isolated.

Q. Did you at any time visit Camp Alger, Major?

A. Yes, sir; several times.

Q. What, in your judgment, was its character for a camp, as to healthfulness, general sanitary conditions, water supply, etc., which, of course, is involved in the general question?

A. I should think, General, it would be considered a good camping ground, except that I am not familiar with the climatic conditions and the healthfulness of this immediate locality—whether malaria was prevalent, etc. The ground was rolling, and it seemed a desirable place if the water supply was all right. So far as the water supply was concerned, they complained of a little shortage at first; I went there very soon after the first troops were there.

Q. Did you visit Camp Thomas at any time?

A. Yes, sir.

Q. What was the condition of things as you found them there?

A. I visited Camp Thomas in the first week in August, leaving here, I think, about the 1st or 2d day of August—somewhere about that time. There had been a good deal of rain then for about two or three weeks, and the surface of the ground was not in good condition. The troops had been located there, a good many of them, since the latter part of May, and their individual camp sites were not in very good condition, owing, I think, to the sink question more than to anything else.

Q. How were they as to their proximity—the proximity of the regiments and companies to each other, and the tents in the company streets, and all that?

A. It would seem to me that there was not ground enough allotted to each regiment. It seemed to me that the company tents and the individual tents were too close together. The regiments of the brigades were too close together.

Q. How as to the sinks, with reference to the company quarters?

A. It seemed that at that time more care had been taken to locate the sinks at some distance from each regiment; but at first the sinks were located too near each regiment, but as they filled up the new ones were dug farther away. I thought the first ones were too close, as the soil could not be dug deep for the sinks.

Q. Was there any evidence of troops having moved to go off low ground?

A. Some of them had, but some had been in the same quarters, they told me, from May until this time I was there.

Q. What proportion was that, Major—what proportion relatively?

A. I don't know that I could answer that. I know a good many regiments had moved, but whether it was one-half or two-thirds I do not know.

Q. Did you make any investigation as to any particular regiments, based upon their health reports; and, if so, what; and what were the results of the investigation?

A. The first or second evening we were there, I went there as a member of a board with Dr. Reed, of the Regular Army, and we called upon the surgeon in chief of the corps and inquired as to the health and general condition of the troops; and he showed us the reports for two or three weeks back, and I noticed that one or two of the regiments showed a good health report as compared with the other regiments, and I suggested to the doctor that we visit that regiment and ascertain why they had a better condition of health than the others; and we visited them the next day.

Q. Do you know what organization this regiment was in?

A. It was the Eighth Massachusetts; I don't remember what the brigade was.

Q. The Eighth Massachusetts—well, we can locate it from that. Did you make the visit; and, if so, with what result?

A. On account of one of the regiments being located a short distance from one of the highways of the park, the natural condition of the camp was not as favorable as some of the other regiments, as it was located in a low, level bit of ground, lower than the highway, and there was scarcely any opportunity for surface drainage, and we had to be careful in getting to the headquarters, as we would go over our shoes in mud. I called upon the colonel of this regiment and stated that the health reports from the corps showed he had good health in his command, and I said, "You haven't a good location. To what do you attribute your good health report?" and he said, "We will talk with the surgeon." And we visited the surgeon and asked the same question, and he said that from the very first they had insisted that the men drink nothing but boiled water. He said, "The water we use is taken from Blue Springs, some distance, in barrels. It is boiled, and the men have orders not to use anything but boiled water." I asked him if that order was followed, and he said there might have been single instances where it was not obeyed; but he said, "It is generally obeyed." I asked him, "How about your sinks?" and he said, "We take special care of them, and I want you to see them." And we went out and visited them. I saw a spade there, and he said, "Orders are issued that when a man defecates he has to throw a spadeful of dirt and some lime over it; and those two things prevented sickness."

Q. Did he mention any particular exceptions on the part of the men in obeying the order about boiled water only being drunk?

A. He said, "There is one officer, a lieutenant, who said he did not propose to drink boiled water," and the doctor said, laughingly, "We took that man, yesterday, to the hospital with typhoid fever."

By Governor WOODBURY:

Q. Did you make a report to anyone in regard to the condition in which you found the camp?

A. At Chickamauga?

Q. Yes, sir.

A. Dr. Reed and I joined in the report to the Adjutant-General.

Q. When was that; about what date?

A. This was the first week in August; and I also made an individual report to the Secretary.

Q. What recommendations did you make at that time in regard to the camp, as to its abandonment or anything of that kind?

A. Individually I made a report to the Secretary that in my judgment the camp should be at once abandoned.

Q. That was about what date in August?

A. About the 8th or 10th of August.

Q. I notice in reading from his report—the report of the Adjutant-General that that was recommended—that the camp be abandoned—about the 15th of August. Do you know whether that was the result of your report, that such an order was issued?

A. I think so, sir.

Q. Please state whether or not the unsanitary condition of Camp Thomas was brought to the attention of the Secretary of War previous to your report; and, if so, through what medium?

A. I think not; not to my knowledge.

Q. How long have you been in the Secretary's office?

A. Since the 27th of May.

Q. Please state what complaints, if any, were lodged with the Secretary of War as to the unsuitableness or unsanitary condition of Camp Alger.

A. I don't know that there were any reports made as to that, except individuals may have—individuals may have said that they thought the camp was undesirable on account of the lack of water.

Q. You say "might have been made." Was it made?

A. Not that I know of. Perhaps I should say in this connection—in reference to my report as to camp at Chickamauga—I stated to the Secretary at the same time that it seemed to me that if the camp was to be moved from Chickamauga time enough should be taken for the proper officers to select a proper location; and following that, orders were at once issued for officers to go and select proper camp sites; certain officers were sent to Knoxville and some to Lexington and some to Huntsville.

Q. If complaints had been lodged with him as to the condition of Camp Alger, would you, from your knowledge of the business there, have been likely to have known it?

A. I think so. I gathered from what I saw at Chickamauga that it seemed to be the general impression of everybody in the camp that they were there only for a few weeks—from the commanding general down to the private, they all seemed to think that—that they were preparing to go to Cuba, or some other place, and not much care was taken in the selection of their individual camp sites. They all looked on that place as a temporary expedient, and proper care was not taken for that reason.

Q. Please state whether or not the Secretary was requested to abandon the camp at Tampa at any time by inspectors or officers in command of camps.

A. That I do not know, sir. I understand a report was made from officers sent down there as to the unhealthfulness, and the camp was ordered moved; but I did not see any such report. I heard some conversation.

Q. Did you have anything to do with Camp Wikoff?

A. I was there two or three times, sir.

Q. Had you anything to do with the selection of the camp?

A. No, sir.

Q. While you were at Chickamauga did you take any official action relative to the water supply—to examine it particularly?

A. Yes, sir; I examined the water supply, but not from a medical standpoint. We drove to the different wells and the different intake pipes from all other sources of supply.

Q. What did you find to criticise in regard to their water supply, if anything?

A. Well, I should say, in a general way, that the water supply seemed to be ample; the judgment of men who examined the water and made proper tests was that the water was all right. There was water enough.

Q. Did you notice whether any attempt was made to allow the water from Chickamauga Creek to settle in barrels or tanks before using?

A. At one of the division hospitals we visited they were using a system of filters, and the complaint was made by the surgeon in charge that the filters did not work, and Dr. Reed made a personal examination as to the condition of the filters, and he said, "These filters won't work with this water where there is too much mud in the water, so that they easily clog up and will not perform the work for which they were intended."

Q. Did you notice whether the substance held in suspension in the water of Chickamauga Creek settled quickly?

A. No, sir.

Colonel DENBY. Gentlemen, have any of you any more questions?

Q. I will ask one question more. Major Hopkins, please state whether or not, when complaints have been made to the Secretary of War as to adverse conditions that existed in any way, the matter has been investigated and such action taken thereupon as was for the best interests of the service. In a general way, you have been familiar with the operations of that Department.

A. So far as my knowledge goes, there was never any complaint made that he was not very anxious to have investigated.

Q. Well, if the investigation proved that the complaints were well founded, please state whether or not measures were taken to correct those things.

A. They were, and at once; and I was instructed upon this investigation that Dr. Reed and myself made at Chickamauga and other hospitals to wire every night at the conclusion of our labors each day as to what, if anything, could be done for the improvement of the men; not to wait to write, but to wire; and we made such a report every night. The Surgeon-General said, "You make a report every night, and I will immediately act upon any report you and Dr. Reed make as to what is needed in these various hospitals."

By Captain HOWELL:

Q. What was the elevation of the ground at Miami above sea level?

A. Well, I am not prepared to say; I think our reports show. It is only a very few feet; I should say, at a rough guess, 5 or 6 feet.

Q. I think the report stated 2 or 3 feet.

A. Well, there might be places a little higher than that.

Q. Did you consider it a proper place to camp?

A. No, sir; only, as I said, in case of military necessity. It was suggested that that be used as a debarkation point to take troops.

Q. But there was only 12 feet of water there?

A. Yes, sir; but they could send troops there and shift them in light-draft boats from there to Key West. I did not like it as a permanent camp in any sense.

Colonel DENBY. If you have any further statement to make, we will be pleased to receive it.

The WITNESS. I have nothing further to say.

General BEAVER. We will request the Adjutant-General to send these reports to complete your testimony.

The WITNESS. And this individual report I made to the Secretary of War also.

General BEAVER. Is that in writing?

The WITNESS. Yes, sir.

WAR DEPARTMENT, ADJUTANT GENERAL'S OFFICE,

Washington, January 10, 1899.

SIR: Referring to your verbal memorandum asking for (1) report of board consisting of the following officers: Col. James Moore, Assistant Quartermaster-General, United States Army, Col. Charles R. Greenleaf, Assistant Surgeon-General, United States Army, Maj. George H. Hopkins, Assistant Adjutant-General, United States Volunteers, dated June 2, 1898; (2) report of board consisting of the following officers: Col. Charles R. Greenleaf, Assistant Surgeon-General, United States Army, Maj. F. G. Hodgson, Quartermaster, United States Volunteers, Maj. George H. Hopkins, Assistant Adjutant-General, United States Volunteers, Lieut. Edgar Jadwin, Corps of Engineers, United States Army, dated June 14, 1898; (3) report of board consisting of the following officers: Maj. Walter Reed, Surgeon, United States Army, and Maj. George H. Hopkins, Assistant Adjutant-General, United States Volunteers, dated July 31, 1898; (4) report of the latter board dated August 8, 1898, I beg to send you herewith official copies of Nos. 1, 2, 4, and the original report of No. 3.

Very respectfully,

H. C. CORBIN, *Adjutant-General.*

Mr. RICHARD WRIGHTMAN,

Secretary War Investigation Commission, Washington, D. C.

WASHINGTON, D. C., *June 2, 1898.*

The ADJUTANT-GENERAL, *War Department.*

SIR: The undersigned officers, assembled by direction of the honorable Secretary of War to inquire into and report upon the water supply at Camp Alger, Va., visited that camp on the 2d instant, and have the honor to make the following report:

The water supply is obtained from two driven wells, several living springs, a well, and a number of surface wells; two additional driven wells are in process of construction, from one of which water was expected to flow to-day and from the other by to-morrow. The Potomac River is about $4\frac{1}{2}$ miles from the camp, the nearest point; $5\frac{1}{2}$ miles farthest.

The driven wells are conveniently located for some regiments; the natural springs and wells are distant from 100 yards to $1\frac{1}{2}$ miles; the surface wells are within the regimental lines.

The quality of water from the driven wells and living springs, as determined by the senses of taste and sight, is excellent; its quantity, as estimated by the engineers, is inexhaustible from the driven wells, but the springs are said to fail in the dry season; the surface wells are temporary expedients. The chief surgeon has given orders to send samples of the water to the Surgeon-General of the Army for analysis.

The method of obtaining water by the men has been to carry it in any vessel they can get, buckets and canteens being principally used; later, barrels have been placed in the camps and water has been hauled. We were informed that a large supply of barrels for the whole command was en route.

The quantity of water immediately available for use by the troops has been confined principally to that for cooking and drinking, being ample for these purposes. Where economy was enforced, sufficient supply was to be had for laundry and washing, but the limited quantity available made the supply for bathing practically nil. The colonel of one regiment informed us that he met this difficulty by marching his men to the Potomac River, distant $4\frac{1}{2}$ miles, for a bath. As a sanitary precaution the medical officer recommended and the commanding general ordered that water for drinking purposes be boiled. As protection against pollution and to economize the supply, guards were placed over the wells and springs, and the flow during the night was used in the mornings to fill the barrels. In other respects there is no objection on sanitary grounds to the location of this camp.

If this camp is to be maintained, it is recommended that prompt measures be taken for an immediate increase in the water supply, so that its quantity shall be without limit for all purposes. The number of driven wells should at once be increased to one for each regiment; or a central plant should be established, made up of a number of driven wells operated by mechanical power, and the water piped to the regiments where bathing arrangements might be conveniently placed.

It is further recommended that until the measures proposed are finally completed no more troops be sent to this camp.

JAS. MOORE,

Colonel, Assistant Quartermaster-General, U. S. A.

CHAS. R. GREENLEAF,

Colonel, Assistant Surgeon-General, U. S. A.

GEO. H. HOPKINS,

Major, Assistant Adjutant-General, U. S. Volunteers.

SPECIAL ORDERS, }
No. 131. }

HEADQUARTERS OF THE ARMY,
ADJUTANT-GENERAL'S OFFICE,
Washington, June 4, 1898.

* * * * *

30. By direction of the Secretary of War, a board of officers to consist of Col. Charles R. Greenleaf, Assistant Surgeon-General; Maj. Frederick G. Hodgson, Quartermaster, United States Volunteers; Maj. George H. Hopkins, Assistant Adjutant-General, United States Volunteers, and First Lieut. Edgar Jadwin, Corps of Engineers, is appointed to meet in this city to-day and proceed to Columbia, S. C.; thence to Savannah, Ga.; thence to Fernandina, Fla., and thence to Miami, Fla., with a view to ascertaining suitable camp ground for forces now in the field. Having completed this duty, all the members, except Colonel Greenleaf, will return to this city and submit report in writing as to result of observations. Colonel Greenleaf will proceed to comply with orders already given him.

The travel enjoined is necessary for the public service.

* * * * *

By command of Major-General Miles:

H. C. CORBIN, *Adjutant-General.*

WASHINGTON, D. C., June 14, 1898.

The ADJUTANT-GENERAL UNITED STATES ARMY,

Washington, D. C.

GENERAL: The board of officers, convened under paragraph 30, Special Orders, No. 131, June 4, 1898, from your office, to visit places designated in said order, "with the view to ascertaining suitable camp ground for forces now in the field," having completed this duty, have the honor to submit the following report:

COLUMBIA, S. C.

The board left Washington on the evening of June 5, and arrived at Columbia at 1 o'clock p. m., Monday, June 6. It was met by the mayor and health officer of the city and a committee of citizens. Proceeded at once to a proposed site for a camp located about 7 miles north of the city on the line of the Southern Railway. It was immediately found that there was not a sufficient supply of water there. We then went south on the line of the Florida Central and Peninsular Railroad 7 miles to Congaree Creek, which would afford an abundant supply of water of apparently good quality, but the stream is bordered on either side by a swamp, in some places a quarter of a mile or more in width, and while there are abundant facilities for a camp on the high ground, a swamp leading to the river presented a serious obstacle. It was stated that farther up the stream some 8 or 9 miles the swamp disappeared, and the highland extended to the banks. The time required to construct proper transportation facilities, and the fact that the water would have to be pumped from the river to the camp ground, seemed to the board sufficient reason for thinking that it would be undesirable to locate a camp there, and it did not seem advisable to visit that location. We then returned to the city to visit the site lying east, which was occupied by the Confederates as a camp from 1861 to 1865. The location is from 3 to 3½ miles from the city. We found one small stream of water, which probably has a capacity sufficient to supply one regiment. A quarter of a mile beyond this is Gills Creek. It is a clear running stream with a capacity of about 4,000,000 gallons per day. The citizens who accompanied us claimed that it is now at its lowest stage. There is sufficient desirable camping ground on either bank of the creek to accommodate from 5,000 to 10,000 men.

On this stream, at this point, was located at one time a mill, the creek having been dammed for the purpose. The mill has been destroyed and the dam partially broken away, leaving a pond about 1½ miles in length and 100 yards in width. While the water in the pond is clear, it does not present a very attractive appearance as a source of supply, the bottom being partially filled with stumps, while the surface of the water shows water lilies and kindred vegetation. The board thinks the site would not be desirable for a larger force than 5,000 men, and even for this number it would not be advisable to install a pumping and distributing plant. We are fearful that in case of long continued dry weather the supply of water would be much less than it is now. The road leading from the town to the camp ground was sandy most of the way, but fairly good. The ground is partially wooded and partially clear. There is an abundance of wood for camp purposes. The ground is gently sloping, capable of good drainage. At the left of the stream, about one-half or three-quarters of a mile away, is located the site of the old Wade Hampton homestead. The health board of the city reports a recent epidemic of smallpox in the city and vicinity—200 cases during the last three months. The health officer stated he had reason to believe that infection may have been carried into the country. He reported the disease of a very mild type; that there had been only four or five deaths, and that only one new case was reported in the last ten days. Columbia is well provided with railroad facilities, and has ample storehouse accommodation at moderate rental. All kinds of supplies can be easily obtained at reasonable prices.

For a further report as to Columbia, see page 3370.

FERNANDINA, FLA.

GENERAL CONDITIONS.

The board arrived at Fernandina about 10 o'clock Tuesday morning, June 7. The location for the proposed camp is in the immediate vicinity of the city, commencing in fact within the city limits, at the pumping works, and extending

about a mile eastward and about the same distance in a northerly and southerly direction. The northerly, southerly, and easterly edges of the tract are somewhat irregular, giving practically a tract of about $1\frac{1}{2}$ square miles. Through the center of the tract is a hard shell road leading to the beach. A little south of the shell road is a spur track of the main line of railroad traversing the district of the proposed camp. The edge of the camp is about one-half mile from the main railroad station. The northerly half is rolling ground, the southern half level. A portion is clear fields with a few trees; the balance covered with underbrush, which may be easily cleared. Good drill grounds and fine location for target practice near by. The soil is a sandy loam. The natural drainage is good. The sewage of the city is disposed of by the dry earth system. The ocean is about a mile distant, where there is a fine beach of well-packed sand, which affords an excellent place for bathing, and might be used for drill grounds. Between the camp ground and the beach is a salt marsh crossed by a causeway. This site will furnish accommodations at once for a brigade and for at least 10,000 men, provision being first made for carrying water upon the ground, and it is probable that double that number could be accommodated after similar provision has been made for necessary clearing, roadway, and water.

WATER.

The water supply is furnished from an artesian well 8 inches in diameter and comes from a depth of 720 feet. The natural flow from the well furnishes about 1,200,000 gallons a day, which may be increased one-fourth by pumping. About 200,000 gallons of the water are used daily by the city. In addition to this well, from which the city supply is obtained, there are two other artesian wells, 4 and 6 inches in diameter, respectively, which may be utilized if necessary. The quality of the water, as judged by taste, sight, and smell, is excellent. It is charged, when first delivered, with a small proportion of sulphurated hydrogen gas, which is dissipated after a few hours' exposure of the water to the air. There is a small proportion of magnesia carbonate and traces of other salts. The pumping plant is located at one edge of the site, and a suitable system of piping for supplying the camp can readily be laid on reasonable notice, and the board was informed that this would be done on due notice without expense to the Government.

HEALTH AND CLIMATE.

The climate of Fernandina is said to be excellent and generally healthy. The average mean temperature during the summer months ranges from 78° to 80°. During most of the months of the year a sea breeze blows from the morning hours during the rest of the day, and the day of our visit, although the sun was hot, there was a delicious cool breeze from the sea. The prevalent diseases are of the air passages and occasionally of the digestive apparatus. However, the health officer reports that they are very seldom serious in character. A mild form of intermittent fever prevails after a long heated season, but there is no record of a serious form of malarial diseases.

TERMINAL FACILITIES, ETC.

There are ample wharf facilities and warehouses for storage. There is also an elevator said to be good for handling coal; storage capacity, 10,000 tons, handling 100 tons per hour, conveniently located for transferring coal from cars to vessels. The terminal facilities are ample for any probable use, and additional sidings and spurs will be put in by railroad as required. Coal can be placed on board of boats at about \$3.75 per ton; lumber, \$9 per thousand; wood, \$2.75 to \$3 per cord. All supplies will have to be shipped in. The city has only one railroad and one line of steamships. Fernandina has a depth of 20 feet at mean high water through a very narrow cut in the south jetty. The range of tide is 5 feet 9 inches.

MIAMI, FLA.

GENERAL CONDITIONS.

We left Fernandina about 4:30 p. m. June 7, and arrived at Miami, Fla., Wednesday, June 8, about 10 o'clock, and visited the proposed locations for camp with railroad and city officials. The first site shown us is known as "The Prairie," about $1\frac{1}{2}$ miles from town. This is low prairie ground about one-half mile in width and 2 miles in length, well adapted for drill purposes in dry weather, but, in the opinion of the board, not suitable for a camp ground, as the water is too near the surface. Another site was in the immediate vicinity of the station—a strip about one-fourth of a mile in width, extending along Biscayne Bay beach a distance of 2 or 3 miles. The beach is a suitable one for bathing. The soil is sandy loam on a coralline bed which crops out so plentifully over the ground as to make it undesirable for a camping place without much labor. The railroad company is now engaged in clearing a portion of the ground to make it suitable for camping purposes, and their officials stated that they were prepared to put on a sufficient force to clear as much of this land as the Government might require. Until this is done we would not recommend this site for a permanent camp. If it is desirable to use this as a place for the embarkation of troops, a few thousand men at a time might be accommodated. If military necessity requires it, a camp of 5,000 men can be established here.

WATER.

The source of water supply is from springs in the Everglades about 8 miles up the Miami River, carried by an 8-inch pipe to a pumping station in the city, from which it is distributed. The superintendent of the waterworks informed the board that 300,000 gallons per day could be spared for the use of the troops. In addition to this supply, water can be easily obtained by bored wells at a distance of about 20 feet below the surface. We saw a number of wells of this description in the town. The quality of the city water appeared to be good. The water from the small wells is limestone water. We were told that the railroad people were ready to pipe the city water to the camp wherever located.

HEALTH AND CLIMATE.

The climate of Miami is highly salubrious, the mean temperature during the summer months said to be about 80°. The day we were there, at 2 o'clock in the afternoon the thermometer in the shade registered 89°. The sea breeze common to this coast blows here in great regularity. We saw no evidences of great prevalence of mosquitoes or flies. The natural drainage is good.

TERMINAL FACILITIES.

Miami is reached only by one railroad, the Florida East Coast Line. Boats of light draft run to Nassau and Key West. Terminal facilities are small. Spurs can be readily placed to meet contingencies. There are no warehouses available, but the railroad company officials stated that they would put up such warehouses as may be required free of cost to the Government. There is one wharf about 700 feet front and about 100 feet at each end. Depth of water is claimed to be 12 feet on the bar, with a tide range of 1 foot 8 inches. A channel, which is said to have a depth of 12 feet at low tide, has been dredged 60 feet wide a distance of 2 miles to the wharf. No supplies can be purchased at this point without shipping in, except wood, which may be obtained at \$2.50 per cord, and lumber \$17 per 1,000. The cost of supplies at Miami would be Jacksonville prices plus freight charges from Jacksonville to Miami, the railroad giving special rates to the Government. There would be no charge to the Government for ground or water.

JACKSONVILLE, FLA.

GENERAL CONDITIONS.

The board arrived at Jacksonville at 8 a. m. Thursday, June 9, and started at once for the camp in company with General Lee, Colonel Wood, commissary of subsistence; Colonel Maus, chief surgeon, and Mr. Stockton, member of the board of health of the city of Jacksonville. The site for the proposed camp is north of the camp ground now occupied by the forces under General Lee, there being not much camp ground immediately adjacent to the present camp. About 2 miles distant therefrom is a plat of about 1,500 acres which could be made available, two-thirds of which is very well adapted for camping purposes. The soil is sandy, a goodly portion of it being covered with a second growth of pine and oak, slightly rolling, and extends to the bank of Trout Creek, which is from one-half mile to a mile in width. Trout Creek flows into the St. Johns River about a mile below the site and affords fine facilities for bathing. The site is located on either side of the main line of the Florida Central and Peninsular Railroad. There is also a spur from the main line running through the site from west to east.

WATER SUPPLY.

The water supply would be furnished by three 6-inch artesian wells with an estimated natural flow of about 3,500,000 gallons per day. One of these wells is located at the north end of the ground, the other two at close proximity. The quality of water is similar to that at Fernandina. The water is delivered from these wells at an average pressure of 25 pounds. The United States will probably be required to furnish and install the necessary pipes to convey the water to the camps, but there will be no charge for the water supply. The water for the troops now in camp is furnished by the city from artesian wells, and is of good quality and abundant. Eight regiments are in camp. Twenty thousand troops can be accommodated in addition to those already there.

HEALTH AND CLIMATE.

The climate of Jacksonville is excellent, although the average range of temperature is greater than at points farther south, the sea breezes apparently not having the effect they have at points located immediately on the seacoast. The prevailing diseases are similar to those of other Florida cities, although before the introduction of the present water system malarial troubles predominated. The health officer informed us that they were now at a minimum, and only noticeable in and after the rainy season in the fall. The average percentage of sick to the command as estimated by the chief surgeon is less than 1 per cent. The natural drainage is good, although artificial drainage in the form of ditches is necessary at the present camp site to protect the troops from the effects of the heavy fall of rain.

TERMINAL FACILITIES.

The necessary wharf and warehouse space can be obtained. Wharfage, 3 cents per 100 pounds. Lighters are much used in loading and unloading. There are four lines of railroad, and Clyde Line of boats. Supplies at reasonable prices. Jacksonville has a depth of 19.6 feet over the bar, mean high water, with a range of 4.6 feet.

SAVANNAH, GA.

GENERAL CONDITIONS.

The board arrived at Savannah about 4 o'clock June 9, and visited the site proposed by the mayor and citizens' committee. It was located about $1\frac{1}{2}$ miles from the city, where there are accommodations for about 20,000 troops. A good

portion of the ground is in second growth of pine and oak, where there would be a good supply of shade. There is a large drill and parade ground immediately adjacent. The site is from one-quarter to one-half mile in width and contains over 800 acres. The soil is of sand with a clay substratum. There is also other desirable camping ground near by. The natural drainage is good. The Avondale rifle range, a very desirable feature, is located on the site proposed. The camp is about 15 miles from Tybee Beach. There is a railroad leading directly to the beach. The railroad people say that trains would run for the accommodation of troops as often as they cared to go to the beach for bathing purposes, and that there would be no charge for transportation.

WATER.

Water will be furnished from the city water supply. There are flowing artesian wells having a capacity of 2,000,000 gallons per day over and above the supply required for the use of the city, and is of the best quality. This amount can be largely increased on short notice. The citizens' committee stated that upon two or three days' notice they would carry their water mains to the camp, which would compel them to lay about a mile of water main. They would then put in pipes leading to the various camps, extending them to each regiment.

HEALTH AND CLIMATE.

The climate of Savannah is similar to that of cities along this coast. The statement was made by the health officer that the average mean temperature during the summer months would not exceed 80°, and that this was tempered by the regular winds blowing from the sea in the afternoon. The malarial affections for which the vicinity has been noted are said by the same authority to have largely disappeared, owing to the thorough drainage of the rice fields that were formerly so extensively cultivated here. In the course of our visit we saw these drains and found them to be very effective in their purpose. The health officer further stated that during certain periods of the year, particularly during the prevalence of land breezes, the mosquitoes and horseflies were very numerous. The soil of this place is quite favorable to the disinfection of excreta by burial, and there is no danger of water contamination should this process be carried out by the troops.

TERMINAL FACILITIES.

The railroad and wharf facilities are excellent, and warehouses can be obtained at reasonable rates. Captain Gillette, of the Engineer Corps, states that there is 26 feet of water over the bar at high water. The range of tide is 7 feet. Owing to the numerous railroads and steamship lines, Savannah is especially suited to obtain competition in rates, and for the rapid moving of troops and supplies, both to and from the place by land and water. Supplies can be obtained from New York by boat service now existing in from forty-eight to sixty hours. The site, water, and piping are offered free. Savannah has fresh-water harbor, a desirable feature. The approach to the harbor is well fortified. After the completion of the inspection at Savannah, Colonel Greenleaf left the board and proceeded to Tampa in compliance with his orders.

BRUNSWICK, GA.

GENERAL CONDITIONS.

The board arrived at Brunswick at 8 o'clock Friday morning, June 10, and were taken by a committee of citizens, headed by the mayor, to the sites which they considered suitable. We were shown tracts aggregating about 650 acres extending along a salt-water marsh facing eastward. The ground is well shaded, except

some 75 acres of open fields and parks. The soil is sandy, and lies very low, part of it being marshy. It is immediately adjacent to the city limits. Roads lead from the city; also the Southern Railway runs through one end of the site and skirts along close to the remainder. The surface of the ground is well adapted for camping purposes, but is not more than 4 to 6 feet above the water line. While at the time of our visit most of the ground seemed dry enough for camping purposes, the board hesitates to recommend this as a desirable point for camping troops any length of time. We are fearful that in case of long, continued rain the camp would become wet and undesirable as a result of the present poor natural drainage. The woody portions of the site were covered with a large growth of oaks and pines, and in the low places was some cypress. The authorities expressed their willingness to clear this ground thoroughly to the satisfaction of the Government. The board, however, is of the opinion that the time required to clear enough of it to serve as a maneuvering place for a body of troops of any size would be considerable. The dampness and ground respiration might make it unhealthful.

WATER.

The city has a supply of good water, obtained from three artesian wells. We were, however, informed by the superintendent of the waterworks that the entire output of his works is now utilized by the city. In addition to this supply, there are artesian wells in and near the tract from which it is estimated could be obtained a daily supply of 1,000,000 gallons. The water mains of the city are in close proximity to the site. The authorities offered to place additional taps, if desired, at reasonable intervals throughout the grounds. They also offered to sink additional artesian wells and increase the pumping supply of the city.

HEALTH AND CLIMATE.

The board were informed by the health officer that the healthfulness of the place had greatly improved under their system of drainage, previous to the introduction of which the unhealthfulness of the place had been a matter of serious consideration. The system of drainage does not extend to the tracts shown, and until a like system of drainage could be applied to the site the location of troops there for any length of time would hardly be advisable. The ocean breezes which come freely add greatly to the salubrity of the climate, which is similar to that of other South Atlantic ports. The atmosphere is tempered by cool sea breezes.

TERMINAL FACILITIES.

The railroad and wharf facilities are good. There are two lines of railroad, and Mallory Line of boats. The necessary warehouses can be easily obtained. If the necessities of war demanded, 5,000 or 10,000 troops might be located there for a short time. St. Simons Island, located 8 or 10 miles from the city, reached by steamers, has accommodations for a large number of men, and water could be obtained by sinking artesian wells. It would be a desirable place for a camp, barring the insufficiency of the transportation facilities. The depth of water over the bar at mean high water is 24 feet. The range of tide is 6.6 feet.

CHARLESTON, S. C.

GENERAL CONDITIONS.

The board arrived at Charleston at 8 o'clock the morning of June 11, and was met at the station by Mayor Smyth, Dr. Horlbeck, health officer, and other officials, who took us in carriages to the sites proposed for camping purposes. The several pieces are located in proximity, but not adjacent, and contain about 165

acres. Most of the land was plowed field and was used for truck gardening purposes. Thirty-five acres of it were in turf, but had little shade. The drainage was excellent. The location was all right, but the area was too small. The plowed land is undesirable. A number of large warehouses, which might be used for purposes in connection with the embarkation of troops, were shown us, with the suggestion that they might be used for barracks. The authorities proposed that in case troops were located on the site they would be furnished with water from the city supply, which is artesian water of excellent quality. The city engineer stated that 500,000 gallons was about the amount they could supply daily from this city plant. One thousand or 2,000 men might be accommodated here if occasion required, but the board can not recommend the site for a permanent camp. The citizens' committee, upon having the conditions explained to them which should obtain at a camp for troops, evidently recognized the unsuitability of the site they had proposed and expressed a desire to have the board visit Summerville, a suburb of Charleston, 22 miles distant on the line of road leading from Charleston to Augusta, which it did on the afternoon of that day.

SUMMERVILLE, S. C.

GENERAL CONDITIONS.

Summerville is a hamlet of some 3,000 inhabitants. Immediately adjacent to the corporate limits is a tract of land largely covered with pine, affording desirable ground for a camp, a portion of which was in good condition for drilling purposes, just outside of the wooded part. This tract was estimated to embrace 800 acres. The soil is of sand from 5 to 8 feet deep, underlaid by a stratum of clay. The natural drainage is fair. Summerville is noted as one of the health resorts of South Carolina, being on what they call their high, sandy, piney land. The town is practically situated in a pine wood, and we were told that the ordinance of the city prohibited the cutting of pine trees in the city limits except to make room for buildings or for streets. The town has been traversed by numerous ditches, which was evidently done for sanitary purposes, and the same plan, if carried out through the site proposed, would make it a very desirable location for a camp.

WATER.

The water for Summerville comes from numerous wells. Water is reached at a depth of from 10 to 15 feet, and seems to be of good quality. Located in the city is a large hotel, kept open during the winter months. It was closed at the time of our visit. On the hotel ground is a 9-inch artesian well 900 feet deep. The well was closed down, but the proprietor of the hotel stated that it had been giving 45,000 gallons per day during the season, and, in his opinion, based on pumping done for a short time, a daily output of over 400,000 gallons could be easily had. This well is about a mile distant from the tract under consideration. The proprietor offered the free use of the well. The city committee urged upon the board that the Government drive surface wells to supply the troops. This ground would be an excellent camping place if provided with artesian water, but the board hesitates to recommend it unless so provided, except in case of emergency or for temporary purposes.

HEALTH AND CLIMATE.

The health officers at Charleston who accompanied us stated that the health and climatic conditions of this place are the very best.

TERMINAL FACILITIES.

There is one line of railroad which reaches this site. It is so located, however, that abundant sidings and spur tracks could be supplied easily and on short notice.

A camp at this point would receive the benefit of competitive rates to Charleston. As stated by the traffic manager of the road, there are no warehouse facilities whatever, but lumber is very plentiful and cheap in this locality. The proximity of the town to Charleston gives it practically the advantages of that city for embarkation purposes. The same benefit would apply to all kinds of supplies and materials necessary for camp. Twenty thousand or twenty-five thousand troops could be easily located at this point, provided they had the water supply. The well already in existence does not promise a supply for more than 5,000 men. Charleston has the advantage of several competing lines of railroad and a regular line of steamships. The depth of water over the bar at high water is 26 feet, with a range of five feet. The city of Charleston offered the use of the Charleston hospital free in case troops were located at either Charleston or Summerville. A short distance above Summerville on the line of the railroad we were shown by the railroad officials a tract of land which they said embraced 1,700 acres, and which they offered as a site for a camp ground. It is well located and might be a desirable site were it not so low that a comprehensive system of drainage trenches would be required to insure its healthfulness. The day after leaving Summerville the board received a telegraphic offer of 2,700 acres of land adjoining the outskirts of Summerville on the easterly side, which it was claimed would make a very desirable camp, a railroad side track running through it from Summerville. The approaches to Charleston Harbor are strongly fortified.

AUGUSTA, GA.

GENERAL CONDITIONS.

The board reached Augusta at 8 o'clock, Sunday, June 12, and was met by Mayor Walsh and a committee of citizens. We were taken to the proposed site for a camp which is located to the southwest of the city, adjacent to and in the vicinity of the United States Government arsenal. The ground available is ample for the location of a very large camp. The plateau adjacent to the arsenal was estimated by the committee to contain 600 acres and the adjacent slopes of the hill 1,300 acres more. To this may be added some 300 acres to the northeast. A further site of 700 acres, including the Dyer survey, was also offered in the southern part of the city. The plateau has an elevation of 300 feet above the main part of the city, and was originally covered with a growth of yellow pine, most of which has long since been removed. An undergrowth of small pine and oak, not large enough to afford much shade, covers the plateau. Very little of the land is now cleared. The plot to the south contains a considerable percentage of clear land. The soil is sandy and has a good natural drainage. The plateau is reached by a short construction track with a steep grade, which connects with the main lines in the city. The Dyer survey is traversed by part of the main lines.

WATER.

The board was informed that 300,000 gallons of water could be spared per day at the plateau and 1,000,000 gallons at the Dyer tract. The 1,000,000 gallon supply could also be extended to the plateau by a few weeks' work. The water is obtained from the Savannah River, and after having been allowed to settle in the settling basin for a time is pumped into the city mains, and is the present source of supply of the city. Its quality seemed to be excellent. There are several small ponds formed by the damming of small streams issuing from springs in the hill-sides, and which could possibly be utilized for bathing purposes by the troops. At several points on the tracts springs make their appearance.

HEALTH AND CLIMATE.

The climate of Augusta is reported to be very healthful. The hills afford which is probably as healthy a site as any in the State, and free from all malarial influ-

ences. The nature of the soil and pine woods contribute to make it so. The city of Augusta is located in the valley surrounded by hills. The plateau referred to is on the brow of the hills to the southwest. The reports of the health officers indicate that Augusta compares favorably as regards health conditions with other places under consideration.

TERMINAL FACILITIES.

The facilities of Augusta in the way of railways and warehouses are ample. Augusta is a railway center of considerable importance. The committee stated that as an inducement to secure the location of the camp at this point all the land in question would be offered to the Government rent free, and that the municipalities of Augusta and Summerville would bear a portion of the expense of installing the necessary additional piping and pumps, and, further, that they would supply the water free of charge. It is the opinion of the board that at a few days' notice facilities for 5,000 troops might be provided, and that, several weeks being given to install proper distributing facilities, 25,000 men could be provided for. The city of Augusta is installing a new water-supply plant, locating a large reservoir immediately adjacent to the arsenal ground, which they said would be completed in about seven months. When completed the water supply should be ample for any number of troops that might be located in that vicinity. We left Augusta at 2 o'clock.

COLUMBIA, S. C. (SECOND VISIT).

In compliance with telegraphic instructions from the Secretary of War, the board proceeded to Columbia and reexamined one of the sites proposed. We reached there at 5 o'clock Sunday afternoon and immediately proceeded by rail and carriages to the site located on Congaree Creek, 7 miles from Columbia. This site is the second one visited by the board on Monday last. The ground is well adapted for camp purposes, on a high sandy place, ample to accommodate as far as ground is concerned a large body of troops. Its area is about 4,000 acres. It is covered with a growth of long-leaf yellow pine, very little of which had been removed except in a few places under cultivation. The soil is sandy and porous, and most of it has an excellent natural drainage. The center of the tract is some 2 miles from the main line of the Florida Central and Peninsular Railroad. The highest point of land is about 500 feet above the sea level. The westerly part of the tract is traversed by Second Creek, with a flow of, approximately, 15,000,000 gallons per day. The creek in question was estimated to be 350 feet above sea level, and meanders through the tract between banks partly of sand and partly of marsh. Its approaches on either side are through a marsh most of the way at the points to which the board was taken. Occasionally it strikes a projecting point of sandy bluff. The water was extremely palatable and pronounced by city and State physicians in the party to be unsurpassed by any supply in that part of the State. The city of Columbia, which now gets its water from the Broad River, is considering the question of obtaining its supply from a creek similar to this one and some 2 or 3 miles farther from the railroad. To utilize this site for a camp considerable clearing would be required, and it will also be necessary to install a pumping plant with the necessary distributing system. This would require under favorable circumstances, probably three weeks.

The creek is not large enough for many troops to bathe in. Causeways could be constructed across the marshes leading to the creek and the water hauled to the camp pending the construction of pumping facilities. Some troublesome insects will be found in these woods, but probably no more than at other similar sites. The land is offered to the Government rent free for one year. Electric power in large quantities was also offered free of charge, provided the Government would install a suitable transmission and operating plant.

HEALTH AND CLIMATE.

Referring to page 2 of this report, the health officer stated that the number of cases of smallpox in existence at the time of our second visit was 60. There had been no new cases for two weeks, and he considered the epidemic at an end.

TERMINAL FACILITIES.

Spur tracks could be built with some difficulty from either the Southern Railway or the Florida Central and Peninsular Railroad to the tract. There are absolutely no buildings that could be utilized for storage purposes nearer than the city of Columbia. It is the opinion of the board that it would require a month's labor under ordinary circumstances to suitably prepare this site for so large a body of men as 25,000.

The committee took the opportunity to inspect the race track and fair grounds, which, together with other available grounds, was estimated to contain some 300 acres. These tracts are at the disposal of the Government if desired for camping of troops, could be supplied with water from the city mains to the extent of 500,000 gallons per day, and would probably afford a fair site for the encampment of a brigade. As an incident to the tour of inspection, the board was requested by committees from the cities of Aiken, S. C., and Greenville, S. C., to visit, inspect, and report upon camp sites at their respective towns. The board did not feel authorized under its orders to make the travel and consume the time that would necessarily be required for this purpose.

In conclusion, the board desires to state that in all cases where the local authorities have expressed their willingness to do certain work to further the preparation of the grounds the said authorities expect to receive timely notice, as far as practicable, both as to the number of troops for whom provision is to be made and the exact location of the parts of the sites desired by the Government, and they also wish, if possible, to have indicated the locations of the various regimental encampments and points at which water is to be delivered, as well as places which should be cleared for drill purposes, etc.

In making its rough estimates of the number of men that could be encamped at the various sites, the board has assumed 40 acres as the minimum area which under ordinary circumstances should be allowed for 1,000 men, and 50 gallons of water per day per man as the minimum supply for ration, toilet, and bathing purposes. The board has been furnished with a large number of maps and other papers, which are transmitted herewith and to which attention is invited. Where practicable, the proper authorities have been requested to indicate on the maps the approximate details of sites offered. The board has been hampered somewhat with the lack of information on the part of the committees as to the data desired. It has received the cordial and hearty support of officials and committees, who have uniformly shown the most marked courtesy.

As before stated, Col. C. R. Greenleaf, Assistant Surgeon-General, United States Army, left the board after the inspection at Savannah. He participated in the formulation of the report on all places visited by him, and concurs therein as far as it relates to those places.

CHARLES R. GREENLEAF,
Assistant Surgeon-General.

Per GEO. H. HOPKINS.

F. G. HODGSON,

Major and Quartermaster, U. S. Volunteers.

GEO. H. HOPKINS,

Major and Assistant Adjutant-General, U. S. Volunteers.

EDGAR JADWIN,

First Lieutenant, Corps of Engineers, U. S. A.

WASHINGTON, D. C., *July 31, 1898.*

The ADJUTANT-GENERAL UNITED STATES ARMY,

Washington, D. C.

SIR: We beg to respectfully report that in compliance with orders from the Adjutant-General's Office, dated Washington, D. C., July 29, 1898, we proceeded to Camp Alger, Va., on yesterday, the 30th instant, and made a thorough inspection of the First and Second Division hospitals, Second Army Corps. At the time of our inspection there were 104 patients in the First Division hospital and 195 patients in that of the Second Division. There were 123 cots on hand for the use of the sick in the former hospital and 188 in the latter. The excess of patients over cots in the latter hospital was met by the use of litters with mattresses for 7 of the patients. There will be no further trouble in this regard, as an additional number of cots were received on yesterday at the camp medical-supply depot. In all other respects we found both division hospitals well supplied with hospital furniture and bedding. The food supplied to the sick was of good quality and abundant. Milk and eggs were being purchased in liberal quantities, the amount of \$395 having been expended for these articles alone during the month of June. The nursing of the patients was being carefully attended to. Ice was available for all of the sick and for the preservation of the fresh supplies.

We found both division hospitals much overcrowded. This was due to the reception of a large number of cases of measles and venereal diseases. The tents were also uncomfortably warm, as the tent flies were being used to cover the patients. More hospital tents should be at once supplied, and the services of two additional contract surgeons to each division hospital secured for the better care and treatment of the large number of patients.

WALTER REED,

Major and Surgeon, U. S. A.

GEO. H. HOPKINS,

*Major and Assistant Adjutant-General, U. S. Volunteers.*WASHINGTON, D. C., *August 8, 1898.*

The ADJUTANT-GENERAL UNITED STATES ARMY,

Washington, D. C.

SIR: In compliance with orders from the Adjutant-General's Office, dated Washington, July 29, 1898, we have the honor respectfully to submit the following report of an inspection made of the following United States general hospitals and division field hospitals, viz: United States general hospital, Fort Monroe, Va.; United States general hospital, Fort McPherson, Ga.; Leiter general hospital, Camp Thomas, Ga.; division field hospitals, Camp George H. Thomas, Chickamauga Park, Ga.

At the time of our inspection, August 1, 1898, the United States general hospital, Fort Monroe, Va., contained 421 patients, 36 of these being in the wards of the post hospital and the remainder, 385, in tents. We found the tents well located and properly floored. The general arrangement of the wards was excellent, and the space allowed for each bed sufficient. The supply of bedding and clothing for patients was abundant, these articles being furnished both by the United States Army Medical Department and by aid societies. The number of nurses, male and female, was quite sufficient for every want of the sick and wounded, and the general cleanliness and police of wards and grounds very satisfactory. Delicacies such as jellies, oranges, lemons, wines, and canned soups, received from voluntary contributions, were carefully arranged in a suitable storeroom.

There was also on hand a fund of about \$1,000, for expenditure for milk, eggs, ice, etc. A well-arranged kitchen and suitable dining room were provided for the proper preparation and serving of the food for the sick, convalescents, and men

of the hospital corps. The number of surgeons on duty was entirely adequate for the proper attendance of the patients. In all respects this hospital was found to be in excellent condition, reflecting much credit for its general good management upon Maj. Calvin Dewitt, United States Army, chief surgeon, and the medical staff and nurses under his command.

The United States general hospital, Fort McPherson, Ga., was inspected on August 2, 1898. On this date there were under treatment 570 patients, more than 90 per cent of these being cases of typhoid fever. We were told by the chief surgeon, Maj. Blair D. Taylor, United States Army, that 159 cases of typhoid fever would be admitted on the following day (August 3). For the purpose of accommodating such a large number of sick, all available rooms in the four sets of barracks had been converted into wards, in addition to the erection of a large number of tents on the parade ground adjoining and immediately in front of the barracks. The tents were being rapidly floored at the time of our inspection. These, together with the barracks, would afford accommodation for about 1,000 patients.

While we found, as the result of a careful inspection of every ward, that the patients were properly cared for, both as to medical attention and nursing, and were well supplied with bedding, clothing, and food, yet it was quite evident that the hospital was inadequately supplied with a sufficient working force, especially nurses, clerks, and general helpers, and that many necessary articles, such as portable bath tubs, chairs, thermometers, clinical and ordinary (for taking temperature of patients and bath water), glassware, basins, urinals, medicine lockers, catheters, etc., were wanting.

In addition to the services of the chief surgeon, who has general supervision of the management of the hospital, there should be on duty at this hospital one surgeon as executive officer and one surgeon as property officer. There should also be supplied two clerks familiar with army papers and one stenographer and typewriter. We consider it quite necessary that the chief surgeon should have authority to purchase in the city of Atlanta the various articles above mentioned, without waiting for these articles to be supplied from the medical purveying depots. He should also have authority to hire as many scrub women as are necessary to keep all floors, hall ways, etc., clean at all times. (A telegram embodying these recommendations was forwarded to the Surgeon-General upon the conclusion of our inspection.) As the result of a lack of sufficient laborers, the general condition of the various barrack rooms used as wards and the police of the grounds in the vicinity of the hospital was unsatisfactory. We also found that a number of recruits were quartered in a temporary building in such close proximity to hospital "D" as to disturb very much, by their conversation and singing, the sick in this building. Not only should these recruits be at once removed, but we recommend further that an officer and a suitable number of men be detailed as a permanent guard to maintain order and quietness in the vicinity of this hospital.

The Leiter general hospital, Camp Thomas, Ga., was inspected on August 3, 1898. The number of patients was 217, almost all cases of typhoid fever. The number of beds in this hospital was 255. There were also being erected tents for the accommodation of 80 sick. We found this hospital was much overcrowded. Rooms having a capacity for 4 patients were crowded with 6 or 7 beds. This was the condition throughout the building. Measures should be promptly taken to remedy this very objectionable state of affairs by the erection of additional tents, or, as preferred by the surgeon in charge, Maj. E. C. Carter, United States Army, by the erection of suitable frame structures to serve as wards, and by the prompt furlough of all convalescents. Under no circumstances should more than 200 patients be treated in the hospital building proper.

We found present sufficient physicians and trained nurses for the care of the sick, and that the bedding and clothing was all that was necessary, with the exception of sheets; 1,200 more of these should be supplied. The surgeon in charge reported that he was much in need of clerical labor, and that there was no proper storeroom for quartermaster and commissary supplies, nor sufficient tents for the men of the Hospital Corps. As the result of our inspection we recommend that an officer be detailed at this hospital as quartermaster and commissary, and that a storeroom be erected for the care of all supplies, when they could be delivered by rail directly at the hospital, instead of at Lytle Station, several miles distant; three clerks, one stenographer and typewriter, and 10 wall tents be furnished, and that all convalescents be furloughed. (A telegram covering these urgent needs of the Leiter general hospital was sent to the Surgeon-General upon the completion of our inspection.)

August 4 and 5 we carefully inspected the following field hospitals at Camp Thomas, Ga., viz:

	Patients.
First Division, First Corps.....	90
Second Division, First Corps.....	192
Third Division, First Corps.....	207
First Division, Third Corps.....	201
Second Division, Third Corps.....	416
Artillery brigade hospital.....	29
Cavalry brigade hospital.....	24
Total.....	1,159

The remarks applicable to one will apply to all of the field hospitals at Camp Thomas, Ga., with the exception of the First Division, First Corps, which is at present being gradually abandoned, as the division has left the camp. While there is sufficient bedding, clothing, and other supplies, and while the number of physicians and nurses is adequate to attend to the wants of the sick, the latter are not placed in the best circumstances for their comfort and recovery, owing to the excessive overcrowding of all of these hospitals. Although means are now being taken to relieve this congestion by the erection at Camp Thomas of a general hospital capable of accommodating 500 patients, and by the furlough of all convalescents, we do not believe this will fully meet the necessities of the situation. At the rate at which patients are being admitted to division hospitals we are of the opinion that steps should be promptly taken for the erection and equipment at Camp Thomas of cheap frame buildings for the accommodation of 2,500 patients, if the command is to remain at this station.

WALTER REED,
Surgeon, United States Army.
 GEO. H. HOPKINS,
Major and Assistant Adjutant-General, U. S. Volunteers.

WAR DEPARTMENT,
Washington, August 8, 1898.

THE SECRETARY OF WAR.

SIR: Respectfully referring to report this day made to the Adjutant-General by Surg. Walter Reed, United States Army, and myself, of inspection made of certain United States general and field hospitals, I beg to say in reference to Camp Thomas, the general sanitary condition of the camp is bad. The prevalence of typhoid fever to so large an extent is serious, if not alarming. The general and medical officers have a very serious problem before them. If the camp is to remain there any length of time, orders should be issued that only spring water

of unquestioned purity be used, or that all water for drinking purposes be boiled, and all excreta and refuse be gathered and hauled from the camp each day under contract, and the strictest police regulations enforced. In my opinion the entire command ought to be removed from Camp Thomas at once.

Very respectfully,

GEO. H. HOPKINS,

Major and Assistant Adjutant-General Volunteers.

WASHINGTON, D. C., January 4, 1899.

TESTIMONY OF MAJ. DUNCAN B. HARRISON.

Maj. DUNCAN B. HARRISON, being duly sworn, testified as follows:

By General BEAVER:

Q. Please give your rank and regiment.

A. Major of the Ninth United States Volunteer Infantry, so-termed "immunes."

Q. Where have you served during the war with Spain?

A. Our regiment was organized near New Orleans, La., and we served in Santiago, San Juan Hill for a long period, guarding Spanish prisoners there, and afterwards in camp near San Luis, and our last camp was moved on account of sickness farther away from San Luis.

Q. Your regiment is still in service?

A. Yes, sir; in Cuba.

Q. When did you reach Santiago?

A. Latter part of July—the 28th.

Q. After the surrender?

A. After the surrender, sir.

Q. Where did you disembark?

A. At the long pier at Santiago.

Q. In the harbor?

A. In the harbor.

Q. From what point did you embark?

A. We embarked from New Orleans.

Q. How long had you been in the service prior to your going to Cuba?

A. Some two months and a half.

Q. What was the character as to quantity and quality of the commissary stores which you received in your regiment prior to your embarkation and subsequent to your reaching Cuba?

A. The quality of the commissary stores in Louisiana was the best that could be procured in open market, in so far as the fresh meats and vegetables were concerned, and the same quality of food was extended not only to our regiment, but to the other troops in Santiago Province at that period. I was detailed by my colonel as permanent chairman of a board of survey relative to the meats and commissary stores for our regiment while in camp in Louisiana, a board of survey which is still in existence and of which I am still the permanent chairman; ergo, all the meats, both refrigerated, canned, and on the hoof, had to pass under my surveillance; and through the long period when we were in camp at or near San Luis the meats and commissary stores for the entire brigade passed under my inspection. In addition, all of the hoof cattle which were sent for our brigade were, by order of our brigadier-general, killed by myself, as the instructor of rifle practice of the regiment; and all of that meat was inspected by the board of survey of which I am permanent president. Having had that experience, I am qualified to speak understandingly of the meats received in Santiago proper, and which

I generally inspected every day, all of the meats intended for our camp in San Juan, while we were guarding the Spanish prisoners, and all the meats received while we were in San Luis, where the brigade was camping, consisting of the Eighth and the Ninth and the Twenty-third regiments.

Q. What was the character of the refrigerated beef sent from this country, which you inspected, to Santiago?

A. Well, it was excellent. It was the best quality of meat I had ever received so termed "refrigerated." At first there was a predisposition on the part of commandants of companies and the cooks to scratch for fly specks and black pepper and find fault with the meat on account of its appearance, but that was readily explained by myself, as I had had experience with refrigerated meats in my life. It was attributed to the change of air. The meat brought out from the refrigerators into that hot air, the heat of Santiago being 90 and 95 in the shade, and transported 4 or 5 miles under the broiling sun, could not be expected to reach the camp of a regiment in the same condition as when it left the ship, and in some instances the excessive heat had created what is termed a "beard"—

Q. A beard?

A. What is termed a "beard" by all meat men. It is a green substance, forming on the exterior fat by the excessive heat, but that simply meant a slight trimming of the exterior to demonstrate that the meat underneath was perfectly sweet and sound; and when that was done, it made it clear that the beef was good. The refrigerated beef served to us in camp, and to the entire division down there, and afterwards to the brigade, was eminently satisfactory, and did much to our sick men to strengthen them. No regiment has suffered so much as ours in sickness and deaths. When we went from the refrigerated beef to the hoof meat—we had 225 head of cattle shipped to us, all of which I killed personally—then our trouble began. It was native cattle sent from Porto Rico; 187 reached us out of 225. We killed at 5 o'clock in the afternoon and hung it in a sugarhouse, under the eaves of the sugarhouse on an estate there, the estate of Alcamero, where we permitted it to cool off; but it never did cool off, the animal heat would not leave the meat. Then the sickness among the troops increased materially; and noticing this, I consulted the brigadier-general and the colonel of the regiment, Charles J. Crane, and they ordered that it be killed earlier in the day to give it more time to cool; and after that we killed at 2 o'clock in the day. But that had no effect; the meat retained its heat, and the diarrhea and dysentery increased, and other stomachic troubles. It is absolutely impossible in that climate to cool meat killed on the hoof. We had ice and cool places to hang it in, but it is impossible to preserve meat there for the necessary time—fresh meat. Our dead would putrefy in six hours. Certainly beef exposed to the atmosphere of that climate would putrefy sooner. Every effort was made to cool that meat off, but with no success; and our statistics demonstrate (in the brigade and regiment at San Luis, where the meat was served) that the increase of sickness was over 10 per cent in all the regiments, and in one 15, due entirely to the fresh meat served on the hoof. Now, many of these beeves—steers and bulls—were diseased. The only boards of survey we found necessary during our entire tenure in that camp and the camp at Santiago was on this fresh beef, not the refrigerated or canned beef. We had our share of canned beef; it was eminently satisfactory to everybody; in fact, more so to our experience in San Luis than in any other place. Relating to the boards of survey, we had four to my absolute knowledge to inspect and condemn or order the distribution of quarters of freshly killed beeves filled with corruption, fly blown, and filled with maggots, and all kinds of diseases that are peculiar to cattle. When we returned to the use of refrigerated beef, which we did after using up the cattle, why the sickness materially decreased, and there was a general expression of thanks for the return to the refrigerated beef. Regarding the canned beef, we had one ship-

ment pro rata among the regiments; and in regard to that shipment, our own regiment, of which I speak particularly about and with knowledge—

Colonel DENBY. What was your regiment?

A. The Ninth Volunteer Infantry—immunes.

The WITNESS (continuing former answer). Our cans of beef were held in the storehouse for a period of seventy-two hours. One of the cans in transit from the city of Santiago to San Luis had become injured; the top of the can for the distance of one-half of its surface had been ripped open. That beef had been exposed to the changes of atmosphere and subjected to considerable heat in our storehouse; yet regarding that beef which I was instructed by General Ewers to pass judgment on and get the opinions of the enlisted men and officers in the regiment—I being in command of the regiment at that time—that one can, which had been exposed to the atmosphere seventy-two hours, to my own knowledge, was as pure and sweet as any meat we had while on the island. It showed no tinge. One-half was served to the men in the band and the other half to our officers' mess for the purpose of testing it.

Q. That is, this particular can?

A. Yes, sir; and the other cans distributed not only to our own regiment, but to the Eighth and Twenty-third gave absolute satisfaction, and we regretted that we could not get more of it. They were in shape like this paper basket [indicating a waste-paper basket about 15 inches high, shaped like a truncated cone reversed; diameter, one end 14 inches and 12 at the other] and about that size, as far as my memory can carry me back.

Q. Did it require any special preparation in the cooking to make it palatable?

A. Not at all. They broiled it and fried it, using it both ways.

Q. Was it canned roast beef or canned boiled beef?

A. Canned roast beef.

Q. Did you taste any of it before it was recooked?

A. Yes, sir.

Q. Without any condiments; without salt and pepper?

A. Yes, sir; without any condiments; without any salt and pepper.

Q. How did that impress you; had it a good beef taste?

A. Yes, sir; excellent.

Q. The objection is made that it is tasteless; that it seems to have lost all its nourishing qualities, they being boiled or baked or roasted out of it.

A. It is simply ridiculous to make such a statement.

By Colonel DENBY:

Q. Does it taste like roast or boiled beef?

A. It tasted like good roast beef.

By General BEAVER:

Q. Do you know whose trade-mark was on this beef?

A. I do not know.

Q. Did you get different size cans?

A. No, we had but the one shipment—cans that weighed between 35 and 40 pounds each.

Q. Did you see any of the canned beef issued for travel rations?

A. Yes, sir; lots of it; in fact, we lived upon it for a long time on San Juan Hill.

Q. What was the character of that?

A. Excellent. At no one time have we had to hold a board of survey for the purpose of estimating the fitness of any commissary stores issued to us, with the exception of the hoof meat shipped to us from the island of Porto Rico and one day's rations of fresh beef purchased in open market in the city of New Orleans. During our entire stay in the island of Cuba and in Santiago province—July,

August, September, October, November, and December—six months, we have never had cause to complain, nor have any of the regiments stationed down there ever had cause to complain of any of the commissary's stores. I will venture my epaulettes or my shoulder-straps in making the statement that there is not any officer having charge of the commissary stores or looking after the welfare of his men down in that province to-day that won't fortify my statements; and there are some eleven regiments down there, and that is a sweeping statement.

By General McCook:

Q. Who is this Col. Charles J. Crane?

A. He is an excellent soldier. He was in the Twenty-fourth Regiment for years, an instructor of tactics, a graduate of West Point, and he is a thorough soldier.

Q. How is his health down there?

A. Just previous to my leaving the island he was very ill. In fact, we all were.

By General BEAVER:

Q. I have no objection to these compliments to the Regular Army after we get through with the beef.

A. All right, sir.

Q. Major, as to the beef killed upon the hoof or killed in that climate, if you had a regular refrigerating plant could it, in your judgment, be used so as to put the beef in good condition for use?

A. Well, I doubt it, sir, if you use native beef. There are other reasons why that would not be sufficiently gratifying.

Q. Give us the reasons.

A. Well, the beef is tough and stringy. It is particularly coarse. It is the coarsest beef I ever inspected or tasted in my life. I do not know why; they are fine-looking cattle; beautiful cattle in appearance, but possibly it might be in that climate, where they are raised, something which causes their stringiness and toughness.

Q. What was your business before you entered the service, Major?

A. Well, for a number of years a soldier in various spheres, but before I went into the service it was that of an author and actor and theatrical manager.

Q. You were not in the beef business?

A. No, sir.

Q. Major, we were told by the Commissary-General that his contract with the beef contractors was that the refrigerated beef sent to Cuba and Porto Rico, if covered properly with tarpaulins and kept in the shade, would keep for seventy-two hours. Is it possible, in your judgment, for fresh meat taken from a refrigerator ship to be kept in that climate for seventy-two hours unless it is preserved in some artificial way?

A. All of the refrigerated beef—I will answer by making a statement—all the refrigerated beef shipped to San Luis had first to be transferred from the ship to the refrigerator in the city of Santiago and then shipped by train to San Luis—

Q. A distance of what?

A. Twenty-eight miles.

Q. Taking how many hours?

A. Four hours and a half. (Continuing interrupted answer above.) In the extreme heat of the day, in close, stuffy box cars, in which you could take a Turkish bath at any time; and then after arriving at San Luis it had to be transferred to the weighing scales and weighed for the various regiments, and then shipped in army wagons, and carted in our own case $2\frac{1}{2}$ miles to our first camp and about 5 miles to the second camp. Now, that was issued the following morning to the various cooks, so it had been handled five, six times before being cooked. We

have held it some times under the eaves of the sugarhouse forty-eight hours and handled seven times. So, if under those circumstances, the heat of the day, the transporting, and numerous handlings the beef had to undergo and all attending thereon, and the fact that we have had it forty-eight hours or more and it still preserved its sweetness, I believe it could be held seventy-two hours if refrigerated properly, covered with the ordinary linen or muslin covers, and kept in cool places. Of course these beads and fringes occur, but that only occurs on the fringes of fat, not on the main portion of the beef. That would be subjected to a shaving, and the meat underneath is as good as can be.

Q. In your judgment and in your experience with this beef, Major, have you at any time detected by sight or smell any evidence of its having been chemically treated with chemicals other than are ordinarily used? Salt is chloride of sodium; but I mean chemicals other than those ordinarily used in the preservation of beef.

A. That is absolutely ridiculous. There never was at any time in any of the meats submitted to us; and I know the difference between our refrigerated beef and the frozen beef of Australia. I have seen them in both the yards in America and the freezing yards in Australia, and I know the distinction; and I know the refrigerated beef when I see it, and can test it and can speak with some knowledge covering a number of years of travel and inspection of the meat, which business I intended to go into.

By Colonel DENBY:

Q. That applies to the canned as well as the refrigerated beef?

A. Yes, sir; unquestionably so.

By General BEAVER:

Q. Do you know of any process or chemical mixture that could be pumped into the beef, or that the meat could be dipped in, that could preserve it?

A. No, sir.

Q. Is there any necessity for doing that?

A. No, sir.

Q. Could the beef be helped by it?

A. On the contrary, the beef would be materially injured. I should say it is within the bounds of possibility to take dead beef before it has been cleaned or cut and inject embalming fluid, such as is used on dead people, and get some such results; but to dip meat which has been cleaned and cut, it would immediately cause its putrefaction without question.

Q. To what do you attribute the difference between the refrigerated beef which comes from the North and the beef which you call "on the hoof"?

A. The fact that the refrigerated beef was properly subjected—was subjected to the proper refrigerating process while perfectly pure and sweet, in which process it will keep two or three years if necessary, and that the meat was firm and healthy, and the fact that the cattle killed on the hoof could never in the period of time between its killing and cleaning and being distributed get rid of the animal heat.

By Colonel DENBY:

Q. I would like to ask you right there, if you can not get that animal heat out, how can you use it?

A. You can not use it with good effect.

Q. But the butchers there sell it, don't they?

A. Yes, sir.

Q. Do they sell beef that is not proper and fit for use?

A. I believe they sell beef of any description.

Q. I understood you to say you could not get the animal heat out to make it fit for the use of the soldiers. Now, how does it come that it could be made fit for the people?

A. I suppose, sir, by cutting it into small bits and putting them on ice they could get the heat out to an extent in that way; that is, for the retail business of the city.

By General BEAVER:

Q. I understand, Major, that you said in the butchery there the blood could not be gotten out of the carcass before putrefaction set in?

A. We would unquestionably drain the beef properly, because the quarters were hung for a period of two, twelve, sixteen hours, so that the blood unquestionably drained properly, but the terrific heat of that climate would cause putrefaction if kept beyond that time, and notwithstanding the fact we had hung it for that period of time, it could never—no matter by what process—it could never be entirely rid of the animal heat. The beef, when cut up the next day after its distribution, still retained that animal heat, and if kept beyond that time it will putrefy.

Q. That is, the atmosphere being warmer than the animal heat of the meat, it did not extract that animal heat?

A. Yes, sir.

Q. Is the beef frozen when it comes from the refrigerating car?

A. Not exactly; not virtually frozen.

Q. What is the temperature of the refrigerating places there?

A. In the distributing shed of the various companies at Santiago the temperature was kept at 10 or 12 below through the process of ammonia.

Q. Ten or 12 below—

A. Below zero. And that meat coming from there was subjected to the heat of the day, which was frequently 115, 120, and 125; in fact, the day I left Santiago it was 122 in the shade.

By Colonel DENBY:

Q. And that was when?

A. That was on the 8th of December.

By Governor WOODBURY:

Q. I understand you to say that that beef was subjected to a cold below zero?

A. Yes, sir.

Q. I should suggest, Major, that you give that matter a little reflection. At 32 above zero we have freezing; was that above freezing?

A. No, sir; it was not. In the exterior room of Swift's shed the temperature, as registered by their thermometer, which my attention was called to, was 12 below one day and 10 below another; but regarding the meat sheds proper, on the interior of their sheds, I am not prepared to state what the temperature was there, but my attention was called to the amount of piping containing the ammonia mixture, and it was excessively cold, and I was grateful to remain there a few minutes.

Q. Now, Major, in view of the fact that beef will freeze at 32 above zero—

General BEAVER. Establish the fact that beef freezes at 32.

Governor WOODBURY (continuing the question). Well, say 30 above zero. How could it be that if that beef was not frozen the thermometer indicated so much below that degree of cold?

A. I am speaking of the exterior shed of Swift's.

By General BEAVER:

Q. The beef is not hung in that shed?

A. No, sir; that is the starting shed for their coils of pipe; and there are many more there than in the refrigerators themselves.

By Governor WOODBURY:

Q. I am not trying to make your testimony for you, but it would strike most people as strange that the refrigerating plant was so cold as that—10 degrees below zero, or down to zero even.

General BEAVER. I have been in them where the ice was hanging all over the pipes. I suggest we do not coach the witness.

The WITNESS. I have no knowledge of the temperature of the cars or boats in which the meats were transported; but I do know that in the exterior room, where all the piping—the fountain head of the piping for Swift & Co.'s shed, that it was 12 degrees below on one occasion and 10 on another.

By Colonel DENBY:

Q. Did the men like the tinned beef as well as the refrigerated beef?

A. The supply which we had lasted but for three days, and the men were very much pleased with it.

Q. You ate the tinned beef yourself?

A. Yes, sir.

Q. Habitually?

A. Yes, sir; for the three days we had it.

Q. At your mess?

A. Yes, sir.

Q. What kind of mess were you in?

A. Officers' mess.

Q. How many in it?

A. Field and staff, seven.

Q. Did you cook that beef?

A. Yes, sir.

Q. How did you cook it?

A. Both broiled and fried.

Q. For your table?

A. Yes, sir.

Q. And you found it palatable?

A. Yes, sir.

Q. Was it as good as the refrigerated beef?

A. It was equal to the refrigerated beef.

Q. It has been said here that it was tasteless?

A. We had no such experience.

Q. Did you hear any complaints from the men in the regiment about it?

A. No, sir; not at all.

Q. Do you know how they cooked it?

A. Yes, sir; both broiled and fried.

Q. Do you know what process that tinned beef had been subjected to?

A. No, sir; it tasted to me like good palatable beef cut up and fried.

Q. Could you eat it without frying it or cooking it?

A. I tasted it before it was cooked.

Q. Did it taste like roast beef?

A. Exactly.

Q. And not like boiled beef?

A. Not at all, sir.

Q. You know the difference between roast and boiled beef?

A. Yes, sir; I do.

Q. Down in your country, in Louisiana, they eat a great deal of what they call "bouillon."

A. That is not my country. My regiment was formed in Texas, Louisiana, and Alabama.

Q. And you say it tastes like good beef?

A. Yes, sir; good, wholesome beef.

Q. And if you cooked it you improved it?

A. Yes, sir. That is not only my opinion, but every officer's in the brigade.

Q. As to the refrigerated beef, what difference did you find between that and the meat you buy from the butcher?

A. None at all. I have had as good beef there as at any hotel in America.

By General BEAVER:

Q. Did your mess get its supplies from the supplies of fresh beef?

A. Yes, sir.

Q. And was every other mess in the regiment supplied in the same way?

A. Yes, sir; we had precisely the same meat as the enlisted men.

Q. And your mess was supplied from the meat on the hoof?

A. Yes, sir.

Q. So you speak of your own personal knowledge—not only from your own personal knowledge, but from your experience in tasting it and eating it?

A. Yes, sir; for thirty days.

Q. The beef slaughtered on the hoof, were you able to eat that?

A. We ate it on account of not having anything else. It was tough and stringy, as I said before, and caused an increase of diarrhea and dysentery of 15 or 20 per cent; and in the period when we moved from San Luis to San Juan 10 per cent of our regiment had died and we had a great deal of sickness, and this fresh beef only intensified it; and as soon as we returned to the refrigerated beef, within four or five days' time the dysentery and diarrhea decreased fully as much as it did increase with the introduction of the fresh beef on the hoof.

Q. Do you know the opinion of your surgeons as to the cause of this fluxion in the intestinal troubles you experienced?

A. Colonel Crane was ill for a period, and when in command he asked the question; and when he went away to the hospital I had occasion, on account of the increase, to interrogate the surgeon several times, and they invariably attributed the increase to the fact that these men ate this meat with the animal heat in it.

By Colonel DENBY:

Q. Were any of your officers sick from this?

A. The chief surgeon himself got sick; Major Pollones, the quartermaster of the regiment; George L. Featherby, the adjutant, and First Lieut. Charles L. Wood.

Q. That was ascribed to eating that beef on the hoof?

A. Yes, sir. And myself and my colonel, Charles Crane.

By General BEAVER:

Q. So that out of the mess of 7 there were 5 of you that experienced the ill effects of eating this fresh beef on the hoof, as you attributed it?

A. Yes, sir; and the other two messing with us were at that time in the officers' hospital in Santiago, so that all of the mess present were affected by the change of beef.

By Colonel DENBY:

Q. And they had been well before?

A. Yes, sir. We had all been sick with the pernicious malaria and poison at Santiago, but we had all recovered.

By Dr. CONNER:

Q. To what did you attribute your sickness?

A. Excessive duty, guarding all the Spanish prisoners, on one occasion 360 of whom in a day died; smelling the terrible odors there from incineration places,

which was only a half a mile from our place; and to the fact that we were surrounded by the fever camps at Santiago; and to the final and knockdown blow to our regiments, the bringing in of all the abandoned fever camps—there were 17 of them, nearly 4,000 tents, which were hastily abandoned, and in which there was a great deal of decomposition and putrid excrescence and refuse matter left. Our men were detailed on this duty, and we had to bring them in; and notwithstanding the fact that 91 per cent of our regiment—proven by statistical tables—had had yellow fever and were recruited especially on account of their alleged immunity from yellow fever, we were, after twenty-eight days encampment on San Juan Hill under shelter tents—only little dog tents—we were knocked over like a lot of skittles in an alley.

Q. How close were your men collected to the prisoners and refugees you spoke of?

A. We had to guard the prisoners very closely in order to prevent our prisoners from being attacked and machetted by the Cubans as they went to the sinks. Every day we had to send a guard $4\frac{1}{2}$ miles to the city of Santiago to guard our heavy stores and camp equipage that was then placed on a long dock in Santiago and which we did not bring to the camp, with the understanding by the department commander that we were only to remain on San Juan Hill for a very brief period.

Q. Was your regiment the only one on provost duty?

A. Our regiment was the only one stationed there and guarding the Spanish prisoners.

Q. How long before the embarkation of the Spanish troops did the diseases that you mention break out in your camp?

A. We saw the last troops off the island out of Santiago Province. We shipped the last of them.

Q. Were you twenty-eight days on San Juan Hill?

A. Yes, sir; without a case of sickness.

Q. You were not guarding prisoners then.

A. Yes, sir.

Q. During all that time?

A. From the day we landed in Santiago until the last prisoner was taken from Santiago we were guarding.

Q. Were you on guard duty all the time?

A. Yes, sir.

Q. How were these prisoners guarded?

A. By the alternations of battalions, who were detailed for sentinel duty.

Q. Around this place?

A. Yes, sir; around their camp.

Q. Were any special precautions advised by your medical officers and taken by your regimental officers to protect the men?

A. Everything was done that was possible by both the medical officers and the line officers.

Q. You spoke of a mortality of 10 per cent. That represents a sick list of 50 per cent?

A. On one occasion we had all on the sick list, all, every man in the regiment, except 5.

Q. What was their illness?

A. Pernicious malaria. It is termed by the Cubans "calenture;" it combines the five symptoms of yellow fever, chagres fever, pernicious malaria, and one other called by the Cubans "ponabatro," and typhoid.

By Governor WOODBURY:

Q. What was the total mortality among the prisoners?

A. That I can not tell, so many died before we went there; but it was stated to

me that the average mortality in the Spanish camps was at any period about 125 per day. It averaged that, and as the troops debarked it was cut down to an average of 79 or 80; I will put it at 79, at the lowest figure while we were there.

Q. What diseases did they have?

A. They had yellow fever, typhoid, and the pernicious malaria; but the reigning sickness down there was pernicious malaria, and from it nobody is immune, and from which the Cubans twice a year die like rats—in the spring and fall.

By Dr. CONNER:

Q. Was that regiment white or colored?

A. Colored.

Q. And supposed to be recruited from the lowlands and swamps of Louisiana and other Gulf States?

A. Yes, sir; the swamp districts of Louisiana, and to be accustomed to malaria in all forms.

Q. Did you notice, when they did take sick, that they died in unusual numbers?

A. No, sir.

Q. Between the time of the beginning of your guard duty and the time of the finishing of the evacuation of that part of the island, how many days was it?

A. Twenty-eight days.

Q. And during those twenty-eight days your regiment lost how many men?

A. We did not have a case of sickness during that time?

Q. When did you have it?

A. After bringing in the abandoned camps. They were the camps occupied by the various corps, General Lawton's division, General Bates's division, and General Shafter's division. They were the camps, mainly hospital tents and fever camps, of those various divisions.

Q. It was our own camps, and not the Spanish camps?

A. Yes, sir; our own camps. They had been abandoned, leaving the tents and equipage and everything there just as they went away. They were glad to get away—flaps down, and the bedding and ponchos and everything of the kind all there.

Q. After the completion of this twenty-eight days, during the next sixty days succeeding how many men did your regiment lose?

A. In the next sixty days we lost about 73.

Q. Out of a total strength of what?

A. One thousand and four.

Q. Were these sent to the regular hospitals, or kept in your own hospitals?

A. Some sent to the Hospitale Generale, the military hospital at Santiago, and some were treated in the camp hospital. As we broke camp after the first avalanche of sickness to move away two and a half miles from San Luis, we were ordered to remove our desperate cases. But if we had moved them that distance many of them would have died.

Q. Is San Luis in the hills?

A. Yes, sir; 1,080 feet higher than the city of Santiago.

Q. Was there any noticeable improvement in the condition of the health of your regiment?

A. No, sir; we buried a great many men up there. We lost, to my knowledge, up there 23 men. The effects of this calenture, or pernicious malaria, are peculiar. It would take our strongest men, break them down and make anæmics of them—bloodless. It was terrific in the stomach troubles—awful dysentery and retching. Everything that could be done by the regimental officers, by the surgeons, and notably by the department commanders, was done for our sick. As an illustration of how absolutely overwhelming this sickness was, the three months' allowance of medicine we had was used in five days. We had five men able to answer roll call on the 12th day of September, which was the zenith of our sickness.

By Captain HOWELL:

Q. Is that sickness general among the natives there?

A. Yes, sir; twice a year.

Q. Is that the disease the Spanish soldiers died of?

A. Yes, sir.

Q. At the same time?

A. Yes, sir.

By General BEAVER:

Q. You spoke of the exhaustion of your three months' supply in five days. Were you able to renew that supply?

A. Yes, sir.

Q. Promptly?

A. Yes, sir.

Q. Any suffering from lack of medicines?

A. No, sir.

Q. Had they hospital conveniences?

A. Yes, sir.

Q. How were you able to care for your men when your surgeons were sick?

A. The medical officers did their best to attend to them when sick, and we had an additional lot sent at this time on requisition. It was such an avalanche of sickness; and while there were no creature discomforts, we were at a loss for twenty-four hours to understand it. It was terrific.

Q. How is the medical department at Santiago supplied with medicines and with hospitals for the treatment of the sick generally?

A. Excellently, sir.

Q. You had no lack of anything?

A. No, sir; I visited our sick, by order of our colonel, twice daily.

Q. Did you or your surgeons attribute this awful sickness to lack of medicines or supplies or conveniences for taking care of the sick?

A. On the contrary, the department commander and his successor, General Wood, sent out boards of survey during our sickness, and they promptly made overtures and sent delicacies outside of the regular rations to the soldiers to alleviate their sufferings.

Q. How were your men nursed?

A. By the hospital corps of our own regiment, men detailed for that purpose, and hospital stewards; and then we had two volunteer nurses—two Red Cross nurses—and then the majority of our sick were taken to the general hospital in Santiago.

Q. Did you visit that hospital?

A. Once daily, by order.

Q. What is the character of it?

A. One of the best I ever saw in my life; the Spanish had spent a great deal of money on it.

Q. And they were taken by our Government for our sick?

A. Yes, sir.

Q. Were your men both comfortably taken care of and given medical attention in that hospital, so far as you know?

A. Yes, sir; I have had men apply to be sent to that hospital in preference to our own on account of the delicacies they had there which they could not get in our own.

Q. What is the percentage of deaths, 10 per cent?

A. Over 10 per cent now. Some deaths occurred while I was on the water, I saw, and some of our men are still sick.

Q. When did you leave Santiago?

A. December 8.

Q. How was your command supplied with clothing and camp equipage?

A. Thoroughly. Our men had the blue-lined jackets and the khaki uniforms, double blankets—two issues of blankets—and everything that could be issued to them.

Q. What is your opinion as to the relative value of the khaki and the flannel uniforms?

A. We should have both, the khaki for the day time and the flannel for the night, on account of the heavy dews—terrific dews.

Q. How were you armed?

A. With the Springfield. They were about to issue the Kräg-Jørgensen as I left.

Q. Have you any complaint to make as to any of the supply departments?

A. None whatever; nor any other regiment could possibly make it that was down there during the same period that I was.

Q. Were you familiar with the manner that the commissary and medical and ordnance stores were supplied at Santiago?

A. Yes, sir.

Q. Had they supplies, in your judgment, sufficient for all the troops there; that is, after Santiago was captured and all the depots open?

A. Our personal experience demonstrated that they were.

Q. How is the commissary supplied, with reference to furnishing officers with supplies by purchase?

A. The commissary at St. Thomas—St. Thomas street—had everything in the way of necessities—canned fruits, canned peaches, and canned beef of every kind, canned fruits of every kind and nature, and bulk goods—anything that could be transported to Cuba in that terrific heat.

Q. Have you any suggestion to make as to any of these departments concerning which you have not been specially interrogated? If there is anything you care to say, it will aid us in our investigation, Major. We do not want to confine you to the questions we have asked, but we would like to have all the information you have which will aid us in our inquiry.

A. I can not say anything. I frankly, on oath, with an experience of six months down there, verify my previous statements that there are no complaints of any nature to be made. Of course, you understand, there are men who went down there with the idea that they were going on some picnic, to have tutti-frutti and feather beds; but I am thoroughly warranted in stating that there is no cause for complaint on the part of any of the men of our regiment. They are soldiers.

Q. Are you on leave, Major?

A. Yes, sir; thirty days' leave; I go back next Wednesday.

Colonel DENBY. Any other questions, gentlemen?

There being no response, the testimony of the witness was here concluded.

WASHINGTON, D. C., *January 5, 1899.*

TESTIMONY OF MAJ. HENRY B. OSGOOD.

Maj. HENRY B. OSGOOD appeared, was sworn, and testified as follows:

By General BEAVER:

Q. Colonel, will you kindly give us your name and rank and the department in which you rendered service and where you have served in that department?

A. Henry B. Osgood, major; commissary of subsistence. I served first with General Miles at Tampa, and helped to load the Shafter expedition. Then I was

ordered to Chickamauga Park and served there as chief commissary of the First Corps for a little while, and then of the Third Corps, and then of the camp. I was then, on the 2d of August, ordered to Santiago, and I served there until I left there the 7th of December.

Q. You belong to the Regular Army, I believe, Colonel?

A. Yes, sir.

Q. What was your rank and arm of service in the Regular Army?

A. I was originally lieutenant of artillery. I was twenty-three years and a half in the artillery and then promoted to the Subsistence Department, and I have served there ever since.

Q. What has been the length of your service in the Subsistence Department?

A. Since 1889.

Q. What was, in your judgment, Colonel, the quality of the rations furnished to the men during the late war as compared with the quality furnished the Regular Army in your previous experience?

A. It was just the same, except I think the beef was better than I have usually seen issued. I was post commissary for a good many years, and in various parts of the country, and I have seen the beef we received at all those various posts, and there has been considerable improvement in the ration in that respect and in other respects also. There has been quite a change in our ration within the last ten years.

Q. Well, has the ration in its component parts and the quality of those parts been equal during the war to what you were familiar with in the Regular Army previously?

A. Yes, sir; it is fully equal.

Q. If there has been any change state, if you please, in detail in what the change consisted, either as to quantity, or as to variety, or as to quality.

A. There has been no change in the quality, and none in the variety except that a few years ago they added vegetable components to the ration; that is, potatoes and onions. That, of course, was a great benefit to the men, because up to that time they had to make savings of other parts of the ration in order to buy potatoes and onions.

Q. You spoke a moment ago of the quality of the beef and of late years that has improved. Has the quality of the beef issued to the troops during this war been equal to the best that you have known of heretofore?

A. The quality I have seen issued during this war was much better than I had seen issued before, because I had never seen that refrigerated beef issued. I was always at some isolated post where we had contracts with local cattle dealers and the beef was not as good as we were getting from the big packing houses.

Q. We would like to have a detailed statement from you as to the different points at which you observed the issue of beef and the character of the beef issued—that is, refrigerated beef—during this war.

A. The first was the refrigerated beef issued at Tampa the morning I arrived there—it was not any of my business; that is, I was not on duty in connection with that, but I went in and saw the issue made, thinking that some day it might be a part of my duty. Next, up at Chickamauga, I was chief commissary of the camp, and I saw a great deal of it issued there. Next, at Santiago. I saw more there than anywhere else, because I was depot commissary. I could not tell you how much I issued without consulting my records, and I did not know I was coming before this commission and have not my records with me, but I suppose I must have handled nearly half a million pounds—four or five cargoes.

Q. From your inspection at Tampa, from your knowledge of the issues at Camp Thomas, from your immediate knowledge of the issues at Santiago, was or was not that beef of good quality?

A. I never saw any of it that was not of good quality. Some of it was out of

condition. When that beef started it was all right, and the causes which led to its getting out of condition were attributable to lack of quality.

Q. If this became out of condition, as you term it, was that issued to the troops?

A. I had a butcher in one of the regiments who had been engaged in that business in Cincinnati twenty-two years, a very capable and intelligent man, and I put him in charge of getting this beef, under the direction of a commissary sergeant, and I gave him orders to inspect every quarter carefully and never issue a pound of bad beef. The contract was a peculiar one and the Government was perfectly foot-loose.

Q. Tell us just how that was.

A. Swift & Co., of Chicago, had this contract, and it was so conditioned that they should deliver beef in a refrigerator of their own; a refrigerator, I would say, which was one of the ammonia process; the same kind all the big packing houses have that I have seen. They delivered their beef from there, and every morning I called on them for the amount of beef I wanted issued that day, and it was put out on a block and the butcher inspected it, and if there was any bad it was thrown out and Swift & Co. were not paid for any that was bad, and the Government was independent of Swift & Co. If any was spoiled it was their lookout and not that of the Government.

Q. If there was any bad, it was Swift & Co.'s loss, and the Government lost nothing by it?

A. Exactly.

Q. So far as your knowledge extends, was this inspection thorough?

A. I have not any reason to doubt that it was.

Q. Did you receive any complaints from the troops to whom the beef was issued as to bad quality?

A. I received numerous complaints.

Q. Just tell us about them, if you please.

A. In order to explain that I will have to explain to you the appearance of this beef. You can not always judge things by appearances. It came down there in refrigerator ships—that is, ships with refrigerator outfits in them, with 100,000 or 150,000 pounds at a time. It was whole quarters of beef (fine quarters of beef) wrapped in pieces of muslin and hung up in this refrigerator, just as they hang them in the big packing houses.

Q. Swift & Co. took it out of the ship and put it in the local refrigerator on shore of their own? The Government had nothing to do with that?

A. Nothing whatever.

Q. They issued it from the local refrigerator and the Government received it on the block ready for issue?

A. Yes, sir.

Q. Up to that time, if there was any loss, Swift & Co. must bear it?

A. Yes, sir; and they did bear a considerable amount of it, and came near bearing more by people judging it by their eyes and not investigating any further. That is what I am leading up to.

Q. Let's have it.

A. Owing to the congested conditions—there were a great many Spanish prisoners getting ready for repatriation and our soldiers getting ready to return to the United States, and they were unable to handle it as it should have been. There was one cargo kept in the refrigerator aboard the ship because the refrigerator that Swift & Co. had contracted to erect at Santiago was in the bottom of another ship with about 1,200 tons of freight on top of it, and I did not have "pull" enough to have that freight taken off the refrigerator and taken ashore, so this cargo laid in that harbor a month longer than it should have done. The refrigerator in the ship was just as good as the refrigerator on the shore, but it required opening the refrigerator in the ship every day. After a while we got it out and put it up and

then moved the beef into it. Beef coming out of these refrigerators is moldy. It has a greenish mold on it that is not inviting.

Q. Is that what a witness called the "beard" or "fringe?"

A. I suppose so. I never heard it called that.

Q. We had a witness here yesterday who said it had a "beard" or "fringe" on it that made it look uninviting.

A. It had a green mold on the outer surface. Now, persons knowing how to handle that beef would not cut it to waste. People not knowing how would go to work and trim off too much. A butcher familiar with the beef would make an incision and pull this film off, and right under it is beef in fine order, a great deal better than beef killed on the hoof. This beef in that refrigerator I spoke of now—this particular cargo—was moldy, and I think the climate of Cuba has an effect, I think it must be on livers, that makes people very sensitive, and the appearance of this meat offended their sensibilities, so that there was a good deal of complaint. I had to defend Swift & Co. more than I did the United States on that beef, because beef was rejected unjustly from Swift & Co. by action of the board of survey, and if they had gone a little deeper than by simply outside appearances that would not in justice have been done. I had an encounter with Swift & Co.'s agent on just that point once. I do not know how fully you want me to go into this question.

Q. We can not spend any too much time in getting details, and if there was a board of survey I think it would be well to understand all about that.

A. This particular instance I was going to tell you about illustrates the keeping quality of that beef, as well as the sensibility of stomachs of which I spoke. There is a line of railroad running out from Santiago about 26 miles; one to San Luis and the other to Songo, 7 or 8 miles nearer to Santiago than San Luis, but on another branch. We had troops at both those points. There was a brigade of colored troops at San Luis, and there was a regiment of immunes—Hood's immunes, as they were called—a portion of them—at Songo. I furnished refrigerated beef to both of these points until at one stage they had a controversy about the beef and they insisted upon having beef on the hoof, and I bought cattle and supplied them cattle. By the time these cattle were gone they were very anxious to go back to the refrigerated beef, so instead of sending them more cattle I sent them refrigerated beef to both these points. Two days in succession the beef came back from Songo, which was the place nearer to Santiago than San Luis, with the information that that beef was rotten: that they had had a board of survey on it, and it was rotten. On the other hand, the beef that went to San Luis was never returned.

Q. From the same cargo?

A. From the quarters taken out right alongside each other. I have a certificate of the commissary (the brigade commissary at San Luis) that he never heard any complaints of the beef. I only tell you this to illustrate the difference in people. This beef came back from Songo rotten—alleged to be rotten—and Swift & Co.'s agent came to me and said it had been sent back, and asked what he should do with it, and I said, "I don't care. Put it in the refrigerator if you want." He said that he would not do that, and I said, "Throw it into the bay." He said, "It is pretty hard on us." I said, "It is pretty hard for you and pretty hard for me. I can not go behind the board of survey. Your beef is 'officially rotten,' and you can do what you please with it." I got a little bit tired of him, and I shut him off summarily by saying, "Throw it into the bay," and he went out and in a few minutes he came back, bringing a steak wrapped up in a piece of newspaper. He said, "Colonel, I would be very much obliged to you if you will try this beef." I said, "I don't want to try the beef." He said, "It is perfectly good." I said, "I don't doubt it." He said, "I shall consider it as a favor to me if you will." I said, "I am busy," and I had some pigeonholes behind me, and I said, "Lay it up

or those pigeonholes and I will give it to Captain Barker," and it stayed on the pigeonholes until noon. We were rather high-toned; we had breakfast at 12.30. We turned out early with a little coffee and bacon. This stuff stayed there until noon, and I told Captain Barker if he had a dorky to send for this piece of beef. I did not tell him where it came from. It was sent to the mess and our cook served this beefsteak the next day. I had discreetly said nothing about the history of that beef, and it so happened that every gentleman in that mess said, "That's the best piece of beef we have had since we have been here." And after we had all gotten through, I said, "Boys, I have been pretty mean with you; I should give you the history of that beef," and then told them the story I have just told you.

Q. It was a part of the condemned beef?

A. Out of that quarter that was condemned as rotten. After I told them the story, they said it did not make any difference, it was the best piece of beef they had had since they had been there on the island.

Q. How do you account for that, Colonel?

A. I account for it by men judging by their eyes rather than investigating, as they ought, and going a little deeper.

Q. The beef had this mold on it?

A. Yes, sir; and everything to indicate it was not fit to eat.

Q. Whereas if they had stripped that off—

A. If they had had somebody to manage it as they ought to have had, in two seconds they would have discovered that they had a nice juicy piece of beef.

Q. What command was that, Colonel?

A. It was a battalion of Hood's Immunes—the Second United States Volunteer Infantry.

Q. Did you have an official finding of the board of survey?

A. I think they must have sent it to me afterwards, but they told me—sent me word—they had a board of survey, and if Swift & Co. did not ask for it, I did not, because Swift & Co. were interested, not I. If they had made a protest, I would have hunted up the proceedings for them.

Q. Do you know what became of the beef subsequently that was condemned?

A. No, sir; I do not know.

Q. Were there any other complaints of which you have knowledge?

A. Yes, sir. They were previous to this one. This cargo I spoke of as having laid in the ship's refrigerator for some time on account of the refrigerator which was to be erected on the shore not being gotten out; there was complaint made with reference to that, and they had a board of survey on it. This board examined four quarters. I had something like 40,000 pounds in that refrigerator—or Swift & Co. had. This board examined four quarters of it, and condemned the whole 40,000 pounds on that examination. Feeling that Swift & Co. would justly have a claim against the Government for the value of the beef that was in that refrigerator, I cabled to the Commissary-General and told him these facts; that this board had examined four quarters and had condemned—ordered not to be issued. After their inspection I was ordered not to issue any more of it. I cabled this information to the Commissary-General, and he cabled me back to request General Wood, who was a physician, to examine this beef in the refrigerator. I saw General Lawton, and a board of survey was appointed by him.

Q. That was from superior headquarters to the one that had previously examined it?

A. The same headquarters. General Lawton put himself on the board, and General Wood and Dr. Havard, chief medical director, and myself and one or two other officers, and we examined the beef. I suggested that they have some quarters brought out and cut up, and Swift's men brought out some quarters, and this butcher of mine cut them any way the board ordered, and they smelled it and

investigated it and arrived at the conclusion that this beef should be issued, and not acted upon as suggested by the previous board, with the understanding, however, that a larger percentage should be allowed for waste; and that beef was issued. These quarters came down there with the shanks on and kidney tallow in. The contract called for the shanks to be cut off 8 inches from hind quarters and 4 inches from fore quarters, and the kidney tallow was to be cut out. What weight should be deducted for this was ascertained to be about 10 per cent. Instead of unwrapping these quarters, I issued them as they came from the refrigerator, and deducted 10 per cent from gross weight. I left the wrappings on, to keep the beef clean. This board decided that, in addition to that 10 per cent which I had been allowing, they would allow 5 per cent more, or 15 per cent. The action of the board was changed, and I think they finally allowed a total of 25 per cent, but it was all issued on that basis, instead of being all thrown away or rejected, as the previous board decided.

Q. Colonel, you spoke a moment ago of the Government being liable for this cargo, or might be. Was that based upon the fact that they had freight on top of the refrigerating apparatus, preventing Swift & Co. from getting it out?

A. That was my construction of it. I thought it would be a fair claim against the United States Government; that they had made a contract with a firm that certain things should be done; and that we for a month had obstructed Swift & Co. in doing what they contracted to do, and if anything happened it might be a question of law, but as a question of morals it was plain enough what we should do as well as they. I was afraid a claim might be made against the United States that would result in a suit.

Q. Following this point to its ultimate place, were there any complaints made of this cargo of meat upon which General Wood and General Lawton based their judgment—and the other gentleman of the board—when it came into the hands of the troops?

A. These boards assumed that they were based on those complaints.

Q. After the reissue?

A. They never made any further complaint after the action of this board, of which General Lawton and General Wood and the rest of us were members.

Q. Do you know whether any of it came into your mess?

A. Yes, sir; we had it every day.

Q. What was the judgment of your mess?

A. All the officers bought that beef. It was the only beef fit to eat there.

Q. How did it serve on your table?

A. First rate.

Q. So that your individual experience with it confirmed your official action?

A. Yes, sir; we never had in our mess a bad mouthful of it, and we had it every day.

Q. You say, just in round numbers, in your judgment, you issued about 500,000 pounds?

A. That is merely a guess. I issued, I think, four cargoes.

Q. Was there in any of those cargoes any beef that was found upon sufficient examination to be of bad quality?

A. Not that I am aware of. If we had found a bad quarter it would have been thrown out and not reported to me, because it came out of Swift & Co. and not the Government. The way they test it is, a knife is run in around the bone, as they do in packing houses, and smell it, and that sour smell—what they call sour, I believe—is indicated at once on the knife by smell.

Q. Was the beef at Santiago examined in any other way than that which you have indicated?

A. Not that I am aware of. It came out of the refrigerators on the ship into the refrigerator ashore at night, and this refrigerator ashore was larger than this

room and had parallel tracks. It would hold about 100,000 pounds. They run it in on little trolleys, and they had an ammonia plant. The temperature was down to 35 degrees. It did not freeze it. It just kept it chilled.

Q. It has been also stated here—not in any sworn testimony and not, perhaps, in a way that ought to be seriously considered, but the allegation is made, notwithstanding—that the beef which went to Cuba or Porto Rico was treated with some deleterious chemicals for the purpose of preserving it. Have you any knowledge of any beef that was so treated? You have a large experience. We wish you would tell us what anybody could gain by doing that when it is so easy to preserve it by the refrigerator process?

A. I saw some beef of that kind——

Q. That was——

The WITNESS (continuing). That was alleged to have been “processed,” but it was not beef that the Government of the United States bought or had anything to do with, and I understand very well where this report of injected beef or processed beef or embalmed beef comes from. I have no doubt it comes from these four quarters when the Shafter expedition was getting ready to go out, and I can tell you that story, for I think that is the foundation of all this talk we have been hearing or reading in the newspapers about this “processed” beef.

Q. I did not know you knew that.

A. Well, by accident I happen to be in possession of these facts and from personal observation—this is not hearsay—I saw the beef. I was engaged in helping Colonel Humphrey, an old friend of mine, who asked me to help load these troops.

Q. You were serving on General Miles's staff at the time?

A. Yes, sir. I did not have very much to do, and Colonel Humphrey asked me to go down and help him, and the General gave me permission. I went down Monday and stayed there night and day until we got the troops aboard. While engaged in that business Colonel Humphrey was busy and gave me details for marching the troops in and assigning them to their bunks, etc. I loaded eight out of every ten transports, I think. On the ship that Colonel Weston was on—the *Comal*, I think—the day that expedition sailed, Colonel Weston called my attention to some beef that was hanging in the sun from the fore boom of the ship and asked me to go and look at it. He said it had been hanging there three days, I think.

Q. Was this beef that belonged to the troops or the ship?

A. It did not belong to the troops, nor did it belong to the ship. It belonged to an individual who had requested Colonel Weston, I suppose—I don't know how Colonel Weston knew about it unless this individual had requested it of him—to hang the beef up there and let him see what happened to it. The man's claim was that it was “processed beef.” I don't know what he put in it. Colonel Weston allowed him to hang this beef up—the time I speak of. I was aboard the ship, and Colonel Weston asked me to go and look at the beef and gave me the history of it. I looked at it. It was hanging there in the sun. I ripped the wrapping open and smelled the beef, and there was no odor about it. Whatever the preservative was, it preserved the beef. Now, that beef, I think there were about four quarters of it. One quarter hung over the stern of the ship right next to us. (I forget her name.) This quarter I examined hung from the foreboom of the *Comal*, and I understood there were only four quarters prepared in that way; they were prepared by Armour & Co., of Chicago, for a man by the name of Powell, prepared by process, the secret of which belonged to Powell, and simply for experiment; only four quarters were fixed up in that way, I understood; I suppose to give an object lesson that the results would give in favor of that preparation, and claiming that there were no injurious chemicals used in that process. Colonel Weston told me he had had one quarter cut. I never ate any of the beef; I simply

saw it, and this is its history. That beef was seen by other people. It was hung up there, and I have no doubt it was the primary cause of Surgeon Daly's report, which I saw in the paper the other day.

Q. Was Daly there at the time?

A. He was there at the time and saw that beef, I am very sure.

Q. This was beef, as I understand it, which was claimed by the person who had it prepared to be processed beef?

A. He called it processed beef. They didn't say "injected." They said "processed."

Q. And it was by a process which he claimed to have invented?

A. He claimed it, and did not make known what it was. We didn't know whether it was chemical—I don't know what it could have been.

Q. It had been prepared by Armour & Co. at the request of this inventor, in order to demonstrate that his process would preserve the beef?

A. That is it exactly; the whole story of it.

Q. And he had it shipped to Tampa in order to demonstrate to the authorities there that his process was the proper thing?

A. That he had solved the problem of fresh-beef preservation.

Q. Colonel Weston was the chief commissary of that expedition?

A. Yes, sir.

Q. You are familiar with the appearance of that beef, Colonel—of this processed beef?

A. It does not look any different from any other beef. There must be some injection, I suppose. It did not look as if it had been washed. It had the appearance of ordinary beef.

Q. Governor Woodbury wants to know if it was different in any respect from the beef which you issued at Santiago in appearance?

A. It was different in appearance simply because it had not been in a refrigerator. It had not molded in any way. It looked like a piece of beef that had been exposed for seventy-two hours.

Q. There was no claim that it had been refrigerated?

A. No, sir. The claim was it was absolutely fresh beef right from the block, treated in this way as soon as killed or perhaps before killed—he didn't say about that—and in such shape that it could be hung up anywhere without being put in a refrigerator plant.

Q. Was there any of that issued to the troops or was there any intention on the part of the Commissary Department to issue it?

A. No, sir; not a pound of it. I think Colonel Weston and I were the only two commissary officials that ever knew anything about it. I simply looked at it because Colonel Weston asked me to.

Q. It was an experiment?

A. Entirely so.

Q. And an experiment that the United States didn't need to try?

A. Certainly.

Q. And you were receiving beef which in your judgment was equal to the demands of the Commissary Department?

A. I didn't know what we were going to encounter on the island of Cuba, but they solved that problem by putting up refrigerator plants like those the large firms have in the United States.

Q. Was the inventor of this process present at Tampa?

A. I was told he was, but I did not see him to know him. He came down there to exhibit this processed beef of his, and of course he appealed to Colonel Weston. My knowledge came in simply because I was a friend of Colonel Weston's and examined it at his request.

By Governor WOODBURY:

Q. If these quarters of beef had been put in the refrigerator at Santiago, would their appearance have been so different from the other refrigerated beef that you could have distinguished between the two?

A. I have no idea about that. I don't know what effect this process would have on the molding. There was no mold on the beef that I looked at, and whether or not the material that was used in preserving it would keep it from molding in the refrigerator I do not know.

Q. What would be your judgment if it did not mold outside; whether it would or would not mold in the refrigerator?

A. That molding in the refrigerator is due to the temperature and atmospheric conditions, I suppose.

Q. I wanted to know whether you could not tell whether the beef you actually used there was or was not prepared like this you saw on the ship?

A. I could not say whether it was processed, because I do not know anything about that. I should say, from a common-sense standpoint, if you could preserve it without a process just as well you would not go to the expense of using chemicals.

Q. Was there any suspicion or rumor that the beef there had been processed?

A. No, sir. We knew perfectly well it was the same beef that was eaten in every city in the United States—taken care of in the same way.

By General BEAVER:

Q. The Commissary-General stated, Colonel, in his examination that the contract with Swift & Co. provided for beef delivered in Santiago that would keep for seventy-two hours under proper care, which he described, in that climate.

A. That's right.

Q. Is it possible, in your judgment, for beef taken from the refrigerator to be kept sweet for that length of time in that climate?

A. The "best beef" I told you about as having traveled to Songo and come back from Songo and laid on my pipe holes for hours and being eaten the next day came mighty near having been out seventy-two hours. That's the only proof I have. We never tested if it would keep seventy-two hours, but Swift & Co.'s agent knew that if it was out seventy-one hours and did not keep it was their loss. The contract read seventy-two hours from the ship, but after being on shore—from the refrigerator on shore—it only had to continue good twenty-four hours. The point, as I understand it—I hadn't anything to do with the drawing of the contract, but I have a copy among my papers, and I noticed that provision, and, using my common sense, I concluded that coming from the refrigerator—the ship would be alongshore—beef might be delivered every day and carried 30 or 40 miles inland and put in one of these refrigerators, and, of course, coming out of that again, it would hardly be fair to make it last seventy-two hours.

Q. Then the same provisions prevailed that did, I suppose, in their issue to troops at Chickamauga and Tampa and elsewhere?

A. Yes, sir; exactly. It was local.

Q. Yes; local delivery. Colonel, from your knowledge and experience, could there have been any possible motive on the part of beef contractors of the United States to have doctored beef furnished to the United States with chemicals?

A. No, sir; not the slightest reason, as far as I can see, unless they wanted to go to extra expense.

Q. For the reason that the refrigerator process does keep the beef, and they knew it and you knew it?

A. Exactly. There is no necessity going to the additional expense.

Q. Before we leave this subject, Colonel, have you anything else on the line of refrigerated fresh beef that would be helpful to us in the consideration of the whole question?

A. I don't think of anything, General.

By Colonel DENBY:

Q. When you delivered this refrigerated beef, did your butcher cut off the outside or was it delivered as it was?

A. Delivered as it was. If the organization was large enough and required a whole quarter, a whole quarter was delivered without taking the wrapping off. If the organization was some hospital, where they needed only a few pounds, the quarter was cut up, and the kidney, tallow, and the flank cut out, but he didn't trim off this outside film of mold, and whoever got it, it was their business to peel it off.

Q. So he delivered it to a commissary-sergeant or who?

A. I had a commissary-sergeant whose special duty it was to issue this beef.

Q. To whom did he issue it?

A. We have a ration return which comes in from the regiments. The different companies want to draw a certain amount. If they choose to take an order—suppose their rations amount to 100 rations; that would be 125 pounds of fresh beef that would be due them during ten days or one day, if you please, and the same way in the issue of the other ration—and of course, if they want to draw beef from day to day, they could not be charged with 125 pounds at once; so we gave them a slip of paper entitling them to so many pounds of beef. They took that paper every morning to the commissary-sergeant who issued the beef and told him, "We want so many pounds to-day." The beef would be cut off and given to them and weight noted on this ticket.

Q. And would it be given to the commissary-sergeant of the company or cook or who?

A. Any man who brought the order would get the beef.

By General BEAVER:

Q. Did you issue to brigades, regiments, or individual companies?

A. To the troops direct in most cases; but at Songo and up at San Luis, where there was a brigade commissary or a regimental commissary, I issued it to the brigade commissary or the regimental and he issued it to the troops.

Q. The brigade commissary would make these issues. Did the brigade commissary know the character of this beef?

A. He must have known it, because he was the man who gave me the certificate of its good quality.

By Colonel DENBY:

Q. Why didn't the brigade commissary tell the people who got the beef what to do with it?

A. I don't know anything about that.

Q. Did anybody ever tell them that the thing to do was to cut off this mold and there would be good beef under it?

A. I have no doubt the commissary-sergeant was an intelligent man and knew that.

Q. If there was a board of survey, that was a competent board?

A. We assumed it was competent.

Q. Did anybody ever tell that board that all they had to do was to cut off this outer skin?

A. That board never did me the honor to consult me.

Q. That first board reported against the beef?

A. Yes, sir.

Q. Were not all the facts brought out before the board?

A. I could not tell you. I was the depot commissary, and they never said a word to me about it.

Q. Do you know of any inquiry made by that board as to the fact that this beef was good and all you had to do was to cut off the outside?

A. No, sir.

Q. And when a new board was formed, you were a member of it?

A. Yes, sir.

Q. And you knew these facts?

A. Yes, sir; and knowing these facts, I thought it unjust to condemn all that beef.

Q. How does it happen that the first board did not find out these facts?

A. I do not know, sir. I didn't even see the board.

By General McCook:

Q. Do you know who composed that board?

A. I do not know now, but I have a copy of their proceedings.

Q. Were they men of rank or experience?

A. I suppose so; they always have to be commissioned officers. My recollection is—I am only guessing at it—I am quite sure the president was Colonel Freeman, of the Fifth Infantry.

By Captain HOWELL:

Q. I understand the first information you got that that beef was condemned was the report?

A. I was notified by the Chief Commissary Department that this board had condemned all the beef, and I was directed not to make further issues, and I reported it to the Commissary-General, thinking there would be legal complications, and then applied to General Lawton by the Commissary-General's order for the further examination of the beef by General Wood, who is a physician.

By Colonel DENBY:

Q. How far from your tent did that board sit?

A. They must have been within 100 yards.

Q. And they never found out that the beef was not bad?

A. I do not know. I found out from their report that they condemned all that beef.

Q. What other member was on this board besides Colonel Freeman?

A. I do not recollect.

Q. All officers of the Army?

A. Yes, sir.

Q. Do you know whether they were all regulars or not?

A. I think I remember that Colonel Freeman was president of that board. My recollection is I had some talk with him about it afterwards.

By Captain HOWELL:

Q. I understand your testimony that that beef was sent out to the camp and condemned there?

A. No, sir; General Lawton appointed a board, and afterwards appointed the board which he was on himself and myself and Lieutenant King.

Q. You know what kind of beef is used by these refrigerator companies here in New York and other places. Is there any difference between it and the 500,000 pounds you issued at Santiago?

A. Not that I could discover.

Q. You have eaten beef there and here?

A. Yes, sir.

Q. Did you taste any chemicals in that beef?

A. No, sir.

By Colonel DENBY:

Q. Did this supervising board make any report with regard to chemicals?

A. We made a report; yes, sir.

Q. Did you say anything about chemicals?

A. No, sir.

Q. Was that question raised?

A. No, sir; never heard of chemicals.

Q. You hadn't any idea at that time that any such charge would be made?

A. I never heard anything about it until I saw it in the newspapers about a week ago, and, as I told you, I am inclined to believe that that was brought about by these four unfortunate quarters of processed beef that were hanging on those ships at Port Tampa.

Q. Were they sent to Porto Rico?

A. No, sir.

By Captain HOWELL:

Q. Is the beef issued to the army at Santiago the same as issued to the Navy?

General BEAVER. Colonel Daly says [reads the following statement of Colonel Daly]:

WASHINGTON, D. C., *September 21, 1898.*

To the ASSISTANT ADJUTANT-GENERAL,

Headquarters of the Army, Washington, D. C.

SIR: I have the honor to report, in the interests of the service, that in the several inspections I made in the various camps and troopships at Tampa, Jacksonville, Chickamauga, and Porto Rico I found the fresh beef to be apparently preserved with secret chemicals, which destroy its natural flavor, and which I also believe to be detrimental to the health of the troops.

While on duty at the headquarters of the army at Tampa, at the time of the embarkation of the Shafter expedition, Colonel Weston, the efficient chief commissary, showed me a quarter of beef that had already, as a test, been sixty hours in the sun without being perceptibly tainted, so far as the sense of smell could detect. It is impossible to keep fresh beef so long untainted in the sun in that climate without the use of deleterious preservatives, such as boric acid, salicylic acid, or nitrate of potash, injected into it in quantities likely to be hurtful to the health of the consumer. At Ponce, Porto Rico, much of the beef I examined arriving on the transports from the United States was also of the same character, being apparently preserved by injected chemicals to aid deficient cold storage.

Where efficient cold storage is impossible, transporting beef alive is the method that should receive the fullest consideration by the Government, as being safest for the health of the consumer. When detailed to take charge of the transport *Panama* for conveying convalescents to the United States, I obtained 2,000 pounds of fresh beef from the commissary at Ponce. It looked well, but had an odor similar to that of a dead human body after being injected with preservatives, and tasted when first cooked like decomposed boric acid, while after standing a day for further inspection it became so bitter, nauseous, and unpalatable as to be quite impossible for use. I was therefore obliged, owing to its condition and the just complaints of the sick about it, and the disgusting, sickening odor it emitted when being cooked, and its mawkish, flat taste when served, and the safety of the patients, 255 convalescent soldiers, on board, to organize a board of survey, condemn, and throw 1,500 pounds, all we had, overboard; consequently the convalescents were entirely without much-needed fresh beef, making the duty of bringing the men to the United States in an improved condition a very difficult matter.

In my inspection of the Fourth United States Volunteer Infantry at Jacksonville recently, I observed the same odor and taste upon the fresh beef, but not so

marked; and at camp of Sixth United States Volunteer Infantry at Chickamauga I also, at several inspections, observed it markedly. I there inspected a lot of beef just issued to that regiment, and, while it looked well, was of a sickening odor, like a human body dead of disease and injected with preservatives, and when cooked was quite unpalatable, consequently likely to prove an efficient cause of ill health. The men complained of its insipid and mawkish flavor that high seasoning could not conceal.

Believing that the Commissary Department has been imposed upon by the misdirected commercial spirit of persons furnishing fresh beef, I respectfully recommend that the matter be investigated by experts making a quantitative and qualitative chemical analysis of the several preservatives suspected to be used by getting samples of beef furnished for export to Cuba and Porto Rico.

If the question arises that a report should have been made by me earlier, I beg to say that I have endeavored with all my opportunities to first inform myself by observation of the conditions above noted sufficiently to warrant my drawing the attention of the Adjutant-General at Headquarters of the Army to the matter.

Very respectfully,

W. H. DALY,

Major and Chief Surgeon, United States Volunteers.

This is the very piece you are talking about?

A. Yes, sir.

By Captain HOWELL:

Q. And you know that that was not the kind of beef that was issued?

A. Never a pound of it issued. The Navy have a refrigerator ship called the *Glacier*. The *Glacier* goes all along the coast and supplies the naval vessels. She came into Santiago and delivered beef to us which was purchased from the Navy Department by the Subsistence Department. Their beef, as I understand, is preserved by ice and not by the compressed-air, cold-storage, or the ammonia process. They delivered this beef to us and it was apparently the same sort of beef that had been issued, except it was all hind quarters. That happened just before I left Santiago. They also delivered 5,000 pounds of Dold's beef. It is put up in tin cans, I should say 25-pound tin pails, as large as a milk pail. It looks exactly like minced fresh meat and tastes a good deal like Hamburger steak. It was tried as an experiment and gave good satisfaction, and that was the only beef I saw there, except beef on the hoof.

Q. How did the beef on the ice ships compare with the refrigerated beef you issued?

A. I do not know, because I did not issue it. I knew of its coming, and when taken off the ships it was given to the men. I knew that the *Glacier* would bring some beef, but she didn't come in until after I had "turned over" my duty.

By General BEAVER:

Q. What, in your judgment, is the best possible way of preserving fresh beef for issue in the Army?

The WITNESS. Do you mean preserving it fresh?

General BEAVER. Yes; for issue to the troops as fresh meat.

A. I must confess I am not an expert on that, and I based my views in reference to Cuba on our experience during the civil war. I was at first in favor of cattle on the hoof, and argued against these other arrangements at the time war broke out. I was on duty in the Commissary-General's Office when the war broke out. I have changed my mind materially, and wherever it is possible to issue refrigerated beef I would do it.

Q. In preference to beef on the hoof?

A. Yes, sir.

Q. I understand Dr. Daly to say the same thing. He says where efficient cold

storage is impossible, transporting beef alive is the method that should receive the fullest consideration by the Government. You agree with that?

A. Entirely.

Q. First, the refrigerating process?

A. Yes, sir.

Q. And where that is impossible, then next the beef on the hoof?

A. Yes, sir; that's right.

Q. I think you said you bought some beef on the hoof?

A. I bought 500 head of cattle.

Q. Do you know where they came from?

A. Yes, sir; Venezuela; and I shipped a lot of them to San Luis and Songo and 200 to Guantanamo, and then a small lot to the north coast to Baracoa, the isolated commands on the coast. They had no refrigerators up there and it was necessary to have beef on the hoof.

Q. I think you have already told us what the result of that was. Just repeat that.

A. General Ewers, who commanded the brigade at Songo, seemed to have been dissatisfied with the beef on the hoof and requested me "hereafter to send, as soon as the cattle on the hoof gave out, refrigerated beef" again, and it was his brigade commissary that I saw down at Santiago. They were stirring things up in such way with reference to food that I thought I would have an advance guard and I met the brigade commissary in my office and asked him if he had had complaints about refrigerated beef. He said he had had none, and I said, "Will you be kind enough to put that in writing," and he did so, and I have it among my papers.

Q. What reasons were assigned by the brigade commander of that brigade for preferring the refrigerated beef to beef on the hoof; was it because of the quality of the cattle?

A. The quality of the beef—that would be the quality of the cattle, of course. These big cattle furnish a great deal better beef than small cattle. These small cattle will not dress over 400 pounds. The Western beef, that has been cattle fed on more nutritious food, are better. Down there you can not get the animal heat out of the beef. People there eat beef as soon as it is killed, almost.

Q. Have you had any experience with what is called canned roast beef?

A. Yes, sir; I have had lots of it.

Q. Now, let's hear what you have to say about that, please.

A. I shall have to go back several years. I ran across it in the Department of the Platte several years ago.

Q. We would like to know what you know of it, then and since, and the different modes in which it is put up. We had an officer here yesterday who talked of cans as large as this basket [indicating with wastebasket].

A. I think he must have been speaking of that Dold beef. It came in tin cans put up nearly as large as that, but roast beef I have never had in any larger size than 6 pounds—1, 2, and 6 pound sizes—and I had stacks of it at Santiago.

Q. What is your opinion in regard to it?

A. If you ask my opinion in regard to it, I should say it is good beef; but if you ask me if I like it I would say no. It is put up nicely in tidy-looking packages, but there is no flavoring to it, no condiments, and if you give it to troops that do not know how to cook it and season it, it is not palatable food. I do not like it. I have heard others say if you put onions in it and season it, it is very palatable, but I think the consensus of opinion in the Army has always been against roast beef in cans.

Q. Why is it used, then, Colonel? What is the necessity for using it?

A. Well, it is perfectly possible that you get troops in a place where you can not get any other beef, and you can use it there, and that was the contingency pro-

vided for in purchasing that beef. If you send troops inland 30 miles, they have no way of carrying anything but canned beef or cattle on the hoof.

Q. Is it used to any extent as travel ration?

A. No, sir; it is hardly fair for me to say that. I never used much of it.

Q. It requires cooking?

A. Yes, sir; and it requires seasoning. Canned corned beef is palatable, but this roast beef needs to be heated up and salted and peppered to taste.

By Colonel DENBY:

Q. What is done with this beef before you put it in the can; is it boiled or roasted or what?

A. I don't know their process; it is cooked.

Q. Unless air gets to it, it will keep indefinitely?

A. Yes, sir.

By General BEAVER:

Q. To what extent is this canned roast beef issued to the Army as part of the ration?

A. It is not issued at all, unless they call for it, or unless they are in some situation where they can not get anything else; they don't take it. I had any quantity of it at Santiago, but I never issued it to troops unless asked for, as they preferred fresh beef.

Q. Are the troops compelled to take it as a part of the ration?

A. Not so far as I know. I never compel them to take anything they do not want.

Q. The question, then, of canned roast beef is not a very large question—that is, it is not a practical question in the Commissary Department, for the reason that so little is used?

A. I think it is a practical question only to the extent that we should be able to supply it in places where it is very doubtful if they will be able to get any other beef.

Q. That is, it is an emergency ration?

A. Practically—to reach points where they can not have any other kind.

Q. Did you say that you had not issued any of it at Santiago?

A. I may have issued a little. I had a tremendous lot on hand when I left there. For the Shafter expedition—we put nearly 2,000,000 rations on the ships that were with Shafter's expedition. The troops got out so quick that these rations were not consumed and were left on the island. That is what gave me my work.

Q. Now, Colonel, in an expedition like the Shafter expedition, is it, in your judgment, a desirable thing to have a quantity of beef of this sort as an emergency, so if they get inland and away from fresh beef they would have something that would, in a measure, take its place?

A. Yes, sir; and they had it with that expedition. They had one million eight hundred and odd thousand complete rations distributed as nearly as possible equally among the ships. I know that, because I helped load it.

By Colonel DENBY:

Q. How long has this canned beef been used in the Army?

A. I know it has been used for ten years, and I don't know how much longer. I have been in the Commissary Department about ten years—weil, I have been acting commissary since 1869, off and on.

Q. Did you ever issue it to the troops?

A. Yes, sir.

Q. Where?

A. Not direct to the troops. I was chief commissary of the Department of the

Platte in 1892, and we had a lot of roast beef in it that was issued to the troops, and these rations, had been running along and running along unused, and finally they were all called in and sold. The troops didn't like the beef. When there is no existing necessity for the use of it I don't think it should be used, and it is not used by me.

By General BEAVER:

Q. It is just kept as a reserve?

A. That's all; just as we keep the siege cannon on hand.

Q. Did you ever have any complaints made of it before the war with Spain?

A. Never, except that they didn't like it. It was a silent complaint. They never drew it.

Q. Did you ever see a can of it that was spoiled?

A. My impression is that I have. It is almost impossible to see any canned goods that you do not see spoiled cans. In nailing up a box some clumsy fellow will drive a nail in it and spoil it.

Q. Can it spoil in any other way than any other canned goods? If it is well put up originally and air excluded and it is hermetically sealed, it is bound to stay that way?

A. Yes, sir.

By Dr. CONNER:

Q. Are not mistakes made in the canning process?

A. You get what are called "swelled heads" sometimes; that is, it may have been a little too cool before it was sealed and the air would not be excluded.

Q. Isn't it a fact that cans are noticed time and again that are swollen?

A. That is what is called "swelled heads." You find them in all these canned goods; more commonly in vegetables than meat.

By General WILSON:

Q. In opening these cans, do you find the contents the scraps and drippings, or what do they consist of?

A. All I opened—I never opened many—consisted of good beef, and no scraps about it. It is not the best beef. When they cut up beef, you get rib roast, chuck roast, and the fore quarters, and all that is not first-class salable is put in cans.

Q. Will you describe these opened cans and give the character of its contents, if you have ever seen one opened?

A. I have. It has been so long ago. It is only from memory—it is not exactly from memory, as my memory might not be very good—it is not longer than that [indicating], and it is like rolled roast, and it looks very well, but I don't like it to eat.

Q. Was there any question as to its effect upon the health, its deleterious effect upon the health?

A. I think if I do this [laughing]. Excuse me for laughing. I have heard so much about "deleterious things to the health" down South—I went on a ship to Santiago and we had fourteen surgeons on it, and they discussed microbes so fully I have been tired of hearing of microbes ever since. I made up my mind when I got to Cuba I would do as I always did. I was asked the other day if I had drank boiled water, and I said, "Yes; once, because I could not get any other kind."

By General BEAVER:

Q. As to this canned roast beef, have you anything else to say to us in regard to it that will help us reach a conclusion, even if you have not been asked specially in regard to it?

A. I am not familiar—I did not know they were chasing up this roast beef business, so I do not know what the complaint is about it.

Q. I think you have voiced the general complaint yourself—that is, that it is unpalatable and it must be recooked to make it palatable, and that it must be used with salt and pepper, and it is better to have vegetables with it?

A. That's right.

Q. I infer from what we have heard that it was issued to a much greater extent—and I think it was in Porto Rico—than you seem to indicate.

A. Very possibly at other points. I do not know anything except about those I have been at, yet the records in the Commissary-General's Office will show exactly what the issues were.

By Colonel DENBY:

Q. Do I understand that you say you prefer the beef on the hoof in tropical climates?

A. No, sir; I prefer refrigerated beef if I can get it, and next I would take cattle on the hoof, and next I would take canned roast beef.

Q. In Cuba, then, you would prefer what?

A. Refrigerated beef—such as is put up by a lot of these big packing firms.

Q. On the plains in the United States what would you prefer—in the posts you have been at from time to time?

A. My stations have been in the South. I have never been out on the plains.

Q. There you prefer beef on the hoof?

A. No, sir; the same beef we get all around here. You can get it in any city of the United States of any size—refrigerated beef.

Q. Why do you prefer refrigerated beef to beef on the hoof in Cuba?

A. Because it is so much better beef.

Q. Is there anything in the question of animal heat remaining in the beef?

A. I think there is, but I am not a medical expert and I have heard so many expert opinions down there that were adverse to mine—that the use of tomatoes caused dysentery and disease among the troops, and things of that kind—I would not like to venture an opinion against experts.

Q. When you issued beef on the hoof, did that produce dysentery?

A. I have no knowledge of that, because I was not stationed with the troops. The depot was in Santiago, and these cattle were sent to the troops at various points, and they butchered them themselves. The officer who testified yesterday knows a great deal more about that than I, because he was with that brigade at San Luis—Major Harrison—and he is a very active, hustling man, and I judge he has more knowledge about that beef than anybody. The brigade commissary there delegated to him the privilege of supervising the butchering of the cattle, etc.

By General BEAVER:

Q. In the loading of the troops upon the transports at Tampa, Colonel, will you please state whether or not the vessels upon which the various organizations were to be embarked were designated in advance?

A. They were designated to me by Colonel Humphrey's orders. He would say that "such and such an organization is going aboard such and such a ship; look out for them and put them aboard."

Q. Have you any knowledge of the condition of things in which the regiments made a grand scramble for the ships, and whatever regiment happened to get there first would seize the ship and go aboard it and let the others manage for themselves?

A. No, sir; nothing of the kind happened.

Q. Was it possible for such a thing to happen?

A. It would not be possible for such a thing to happen with reference to any of the ships that I had. The only difficulty I had was with the Seventy-first New York. The lieutenant-colonel thought he ranked me, I guess, when I told him how to load the regiment, and ignored me. I let two companies come on board,

to see if he could run it right and save talk. These men ran all around between decks. So I called a halt, and insisted on assignment by company in an orderly way. The officer complied, and we had no further disorder. The loading, so far as I observed it, was in a soldierly way, and my opportunity to observe was the best possible.

Q. Had you anything to do with the loading of the *Yucatan*?

A. I loaded her.

Q. Did you know what regiment was intended to go aboard her?

A. One battalion of the Second United States Infantry. Colonel Humphrey told me I could put the Rough Riders on the *Yucatan*, and the Rough Riders were anxious to go. The *Yucatan* was lying out in the stream. General Wood and Colonel Roosevelt came to me and said they wanted to go on the *Yucatan*, and I said "She will be hauled in," and they asked if they could not put a guard on her, so that they would be sure to get her. I said it was not necessary; I had orders to put them on board, and nobody else would go aboard. General Wood was afraid they would not get her, and I took him out on a steam launch and put him aboard. When she was hauled in to the pier, Colonel Roosevelt had his command where they were to go aboard, and there was a battalion of the Second United States Infantry Regiment there. I found there was room for the Second Infantry battalion in the after part of the ship, which left 22 bunks unoccupied aft. There were not enough bunks left for the Rough Riders, so I directed that two troops of the Rough Riders should camp on deck.

Q. Then Colonel Wood did not seize the *Yucatan* by getting it independently of authority?

A. He went with me. He did not seize the *Yucatan*. He did as he was told to do. I did not know there was any such statement before you, but I can contradict that emphatically.

By Colonel DENBY:

Q. Was there any confusion about it?

A. I thought they got aboard very orderly.

Q. You knew every regiment that went aboard?

A. Yes, sir; and directed them how to go aboard.

Q. Was an order issued for that—did you ever hear of any order being issued by General Shafter providing for the parceling out of these ships?

A. Never saw it. It would not come to me.

Q. Colonel Humphrey was chief quartermaster?

A. Yes, sir; and I was his friend. I was helping him there. I hadn't any business there except I wanted to get them off. The only mix-up there was was owing to the Seventy-first New York grabbing the cars of the Twenty-first United States Infantry, and they got their baggage mixed up. They got their baggage mixed up and it took me until midnight to get it straightened out. The baggage was all inverted for the whole brigade.

Q. Not only were the ships indicated, but the trains upon which the several regiments were to go on from Tampa to Port Tampa were indicated?

A. Certainly; up at the other end—at Tampa. I heard one of the officers of the Seventy-first New York laughing. He thought it was a pretty good joke that they captured the wrong train.

By General WILSON:

Q. How many of these transports did you actually go upon?

A. I have a list of them, General. I must have been aboard—I was aboard every one except that outfit that came from Mobile.

Q. What did you find their condition to be as arranged for troops, ventilation, and cleanliness?

A. Some of them were good and some were bad.

Q. What do you mean by bad? Make it a little more definite.

A. Well, you take a ship; that is, one with side ports, as they call them, and you can get a good deal more air. There were a good many that didn't have side ports, and the only way to get air down was by electric fans and windsails. I didn't see any electric fans. I told Colonel Humphrey we only had so many bunks and could not put all the men aboard. He said, "You must," and I did in all cases. After we loaded the boats came this ghostly fleet from Spain and there was a scramble. They were all loaded and laid around three or four days.

Q. How about the cleanliness of these vessels?

A. They were all clean.

Q. And small?

A. They were all right as far as that is concerned.

Q. What do you mean by a "good vessel?"

A. I mean one well ventilated, so the men can be comfortable. It was tremendously hot, and there were too many men put on the transports.

Q. Even the 16,000 that were put on—it was expected they could put on 25,000 men—even then they were packed?

A. They put more men on than ought to have been put on, and if they had struck bad weather they would have found out what it was.

Q. Did you have anything to do at all with loading freight?

A. Yes, sir.

Q. Did you have anything to do with loading medical stores?

A. All the freight I loaded was commissary stores and the baggage of the different regiments. I also loaded the horses and mules, and unloaded them, too, after that scare when we had to take them off.

Q. Was there any instance in which the horses were put in above the men?

A. Not that I know of. It might have been a few on the upper deck in stalls. Most of the horses loaded on the ships of the Merchants and Miners' Line. I loaded the *Allegheny* and *Berkshire* with horses and mules, and the artillery was on one of those ships—two batteries of artillery.

Q. Did you load any batteries of artillery?

A. I superintended the loading of the horses, etc. They loaded their own guns.

Q. The testimony comes to us that in a battery of artillery there was one case where a captain and first lieutenant testified that the guns, horses, officers, and men were put on one vessel and the ammunition put on another?

A. I don't know anything about that. I didn't have anything to do with it. I think very likely that happened, though.

By Dr. CONNER:

Q. Was most anything possible in the way of confusion at that time?

A. I thought it was not only possible, but that it was there. It was pretty much mixed up.

Correct as to fact.

H. B. OSGOOD,
Major and Commissary of Subsistence.

WASHINGTON, D. C., January 6, 1899.

TESTIMONY OF LIEUT. COL. HENRY G. SHARPE.

Lieut. Col. HENRY G. SHARPE then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by General Wilson.

By General BEAVER:

Q. Will you kindly give us your name, rank, and the department of the Army in which you are engaged—that is, the staff department?

A. Henry G. Sharpe; lieutenant-colonel and assistant commissary-general; in the Commissary Department.

Q. Where have you served during the war with Spain?

A. At Camp George H. Thomas, Chickamauga, and in Porto Rico.

Q. What was your previous experience as a commissary of subsistence?

A. I have been in the department for fifteen years.

Q. Serving in what capacity?

A. Serving as purchasing commissary and chief commissary of a department.

Q. In what part of the country?

A. I was assistant in New York, after being first appointed, with General Small, and then stationed at West Point for five years as post commissary. Then I went to Omaha as assistant to General Barriger; then to Vancouver as chief commissary; then to Portland as purchasing commissary, and then to St. Louis as purchasing and depot commissary; then to Boston as purchasing commissary there.

Q. Have you had any experience, and, if so, what, in the purchase or use of or inspection of what is known as refrigerated fresh beef?

A. Yes, sir; while at Camp Thomas I made a contract for the delivery of all the beef there.

Q. With whom?

A. Nelson Morris & Co. The contract was in force from some time in the latter part of May, for "during the continuance of the encampment" was the wording of the contract, I believe.

Q. Have you had any other experience?

A. I thought you meant about the purchasing. I have had the issuing of that beef down in Porto Rico to the troops there; that, of course, was not purchased by me, but was issued from the vessel in which it was received.

Q. Have you at any other points than those had any experience, by inspection or otherwise, as to the character of the beef that was furnished to the Army—fresh beef?

A. I have had experience with the fresh beef that was purchased in Porto Rico from the native cattle, and then on one occasion when some refrigerated beef was taken off from one of the vessels. This beef was in excess of the quantity desired on the vessel, and I took some off for the troops at San Juan.

Q. You have been in the Commissary Department in all, then, some fifteen years, have you?

A. Yes, sir.

Q. Have you ever known, in your experience as a commissary, or have you ever heard of the use of beef that was subjected to any chemical process other than the ordinary chemical process of salting or pickling it?

A. No, sir; I never have.

Q. What was the character of the fresh beef for which you contracted and which was issued under your contract at Chickamauga?

A. It was excellent; it was as fine a quality of beef as is offered in any of the large butchering establishments in any city I have ever been in.

Q. I have before me, Colonel, a report purporting to have been made to the assistant adjutant-general at the Headquarters of the Army, dated September 21, 1898, signed "W. H. Daly, major and chief surgeon, U. S. Volunteers," in which he says, that is, in which he is purported to have said, "In my inspection of the Fourth United States Infantry at Jacksonville recently, I observed the same odor and taste upon the fresh beef, but not so marked." He describes that odor above as disgustingly sickening when being cooked, having a mawkish, flat taste; and elsewhere he says it had an odor like a human body dead of disease and injected

with preservatives, and when cooked was quite unpalatable. "It tasted when first cooked like decomposed boric acid." (I don't know how boric acid tastes.) "Then I noticed the same at the camp of the Sixth United States Infantry at Chickamauga. I also at several inspections observed it markedly." Did Dr. Daly make an inspection while you were at Chickamauga?

A. I do not remember that Dr. Daly made any inspection of the camp while I was at Chickamauga. I was there until about the 20th of July.

Q. Are you acquainted with Dr. Daly?

A. I met him, merely, in Porto Rico, when he was down with a vessel to bring up convalescents. I casually met him. He lunched with us one day. At the time that the Sixth Volunteers were at the camp I had left there, but I know that remark can not apply to the beef issued while I was there, because I made an almost daily inspection of the beef. I would like to say furthermore, Governor, that the cooling department at the camp and the commissary storehouse and the bakeries were always places of interest to which visitors were taken. I remember in one instance Governor Hastings was taken by General Brooke and shown through there, and he spoke of the excellent quality of the beef. That I recollect.

Q. I want to read to you another part of it, Colonel, because it has reference to Porto Rico. "While on duty at the headquarters at Tampa, at the time of the embarkation of the Shafter expedition, Colonel Weston, the efficient chief commissary, showed me a quarter of beef that had already, as a test, been sixty hours in the sun without being perceptibly tainted, so far as the sense of smell could detect. It is impossible to keep fresh beef so long untainted in the sun in that climate without the use of deleterious preservatives, such as boric acid, salicylic acid, or nitrate of potash, injected into it in quantities likely to be hurtful to the health of the consumer." We had that subject yesterday. Four quarters were sent down by a man by the name of Powell as "processed" beef, which he wanted sampled, and that was examined by Colonel Osgood and a number of officers; but this is the part which I wish to call your attention to: "At Ponce, Porto Rico, much of the beef I examined, arriving on the transport from the United States, was also of the same character, being apparently preserved by injected chemicals to aid deficient cold storage."

A. When I landed at Ponce there were no transports in the harbor with beef. I arrived there with General Brooke on the *St. Louis* about the 31st of July, I think, and we then proceeded to Arroyo, and the *Massachusetts* arrived at Arroyo on the 8th of August, and I went aboard the vessel almost at once, and as soon as the holds could be broken open I went down and inspected the beef, knowing there was about 200,000 pounds aboard for us, and I found the temperature of the cooling apartment about 30. On one occasion after that I found it about 32. That is sufficient to keep any beef, and the beef was superb beef. It was wrapped up in cheese cloth, and each quarter was labeled. It was the admiration of the natives down there, on account of the size of the cattle, as it was also of the foreign residents, who, though they were few, went into raptures over it. They had never seen such beef on the island since they had been there. It was eaten by almost all the officers.

Q. Speaking of the size, what is the relative size of the quarters of the animals sent from here, compared with the native cattle of Porto Rico?

A. Very much larger. The native cattle in Porto Rico are estimated by the arroba (about 25 pounds), and if an animal weighs from 350 to 450 pounds it is considered a fair weight—that is, when dressed.

Q. Would you consider cattle of that kind as good for beef as cattle of a heavier weight?

A. No, sir; I would not. Another thing to be considered, down there they slaughtered all kinds of animals—bulls, stags, cows, and heifers—all of which are

excluded from slaughter by the contracts which the Department makes. Also, they have what they call "reformed cattle"—that is, cattle which have been used as oxen, but are taken out of draft purposes and allowed to fatten for awhile.

Q. They are called reformed cattle?

A. Yes, sir; they are usually full of those cists which are formed by the goad when driven, making little bunches along on the back. I have seen these animals reeking with blood. They form little sacks as large as from a pea up to a plum, perhaps.

Q. Is it hard or is it soft?

A. At times, hard, and a little mattery.

By Captain HOWELL:

Q. Not good to eat?

A. No, sir.

By General BEAVER:

Q. With your experience, what would you say was the relative value of the native and refrigerated beef, with reference to use in Porto Rico?

A. I think the refrigerated beef is infinitely superior to the native beef.

Q. To what extent have they facilities in Porto Rico for refrigerating the native beef, or for taking out the animal heat?

A. None whatever; they do not do that. The custom is to slaughter in the afternoon or evening of the day preceding that in which the meat is issued, but in most cases that is the practice I made them comply with, and also that they should hang them up to drain. In other words, that they should be slaughtered by cutting their throat, as is done in this country. Otherwise they would habitually slaughter very early in the morning of the day of the sale, and it must be sold by 12 or 1 o'clock, and from 12 o'clock on the price is made to sell it.

Q. Then the animal heat is to a large extent in the body?

A. Yes, sir; I think it was. I do not know, but the rigor mortis had not yet passed off the body, and whether that remained after the animal heat had passed off I am not sufficiently informed to say.

Q. To what extent had you issued beef slaughtered on the island at Porto Rico?

A. When we first landed, I bought some beef the first day, when the troops first got there, the 2d of August, and I continued that until the 15th of August, at which time hostilities had ceased and we had transport available and we could get at the beef aboard the vessel. Then I commenced issuing from that until the *Massachusetts* was ordered away, I think about the 26th of August.

Q. Had the beef from the *Massachusetts* all been taken out before she was ordered away?

A. No, sir. There was a little over 200,000 pounds aboard the *Massachusetts*, and we took off about 54,000 pounds. We took off as much as the command could use, and really a little more, because I made an issue, knowing the vessel could not be held there, as instructions had been sent for her to go down to Santiago to take off the sick and wounded there, and the advice was to get as much beef to the command as possible; so instead of making an issue seven out of ten days, I issued it almost every day, and then made an equalization afterwards.

Q. No refrigerating plants had been erected on shore at that time?

A. No, sir.

Q. Do you know by whose orders the *Massachusetts* was taken away from there?

A. No, sir; I do not; except the order issued from corps headquarters there.

Q. Do you know anything of the provisioning with fresh beef of the transport *Panama*?

A. From Porto Rico?

Q. Yes, sir.

A. No, sir; I do not know of that personally. I know that instructions were given to us to furnish fresh beef to the vessels going north, but those were just general instructions.

Q. Dr. Daly, in his purported report—I say purported because he has not been here, and it has not been proven that he made it—says: “When detailed to take charge of the transport *Panama* for conveying convalescents to the United States, I obtained 2,000 pounds of fresh beef from the commissary at Ponce. It looked well, but had an odor similar to that of a dead human body after being injected with preservatives, and tasted, when first cooked, like decomposed boric acid, while after standing a day for further inspection it became so bitter, nauseous, and unpalatable as to be quite impossible for use.” Is it possible for such conditions as described here to have happened in the refrigerated beef such as you issued in Ponce?

A. No, sir. I do not understand what Dr. Daly means by decomposed boric acid.

Q. You didn't issue the beef personally that went on board the *Panama*?

A. No, sir; I was either at Arroyo or Guayama at the time.

Q. Were you ever aboard the steamer *Panama*, Colonel?

A. Yes, sir; I was aboard some time in October, when the vessel came into San Juan.

Q. Had she a refrigerating apparatus aboard her?

A. That I can not say, sir. I merely went aboard on account of stores that were shipped to me at San Juan.

Q. Who was the depot commissary at Ponce?

A. For a while Major Black, and later Capt. Frederick H. Pomroy.

Q. He was the official, I understand, who issued the beef to the *Panama*. Do you remember the time at which the *Panama* was loaded with convalescents and sent north under Major Daly's supervision?

A. Yes, sir; it was either the 1st or 2d of September.

Q. Do you know whether or not there was a supply of good beef on hand at that time?

A. No, sir; I do not. Up to that time General Miles had not left the island, and although the senior officer on the island in the department, I could not get the reports, as I could not call on the commands, General Brooke being second in command.

Q. Had the *Massachusetts* left Arroyo at the time the *Panama* sailed?

A. Yes, sir; left Arroyo, but I can not speak about Ponce. She left about the 29th or 30th of August. I think Major Daly speaks of the beef keeping sixty hours in the sun. I would like to state that the French army has made experiments with fresh beef, and has carried it two or three days in the sun, beef which had been frozen; and also that while in the camp I had the contractor send me down a quarter of beef which had been frozen, so as to see how it would keep. It came down there just a few days before we left the camp.

Q. At what place was that?

A. At Camp Thomas. So I was not able to make as careful and minute an inspection as I desired, but it kept, as I recollect now, about three days, not in the sun, but under a tarpaulin. Of course the blood got to the lower portion of it, but by cutting off such portions the rest was suitable to use.

Q. Was that refrigerated or frozen?

A. Frozen, at about 10 degrees. I told them to freeze it from 4 to 15 or 20 degrees below zero, but they thought that too low. That is the temperature of the beef sent from Australia to London; and just about the time they did that the State Department published quite an extended statement from the consuls, in the Consular Reports for June, I think, and upon that I based the figures upon which he was to freeze the beef.

Q. That is the beef, I suppose, that General Merritt spoke of as coming from Australia to Manila?

A. I presume so.

Q. He said it was very satisfactory. The quarter that you froze was frozen at about 10 degrees above?

A. Yes, sir.

Q. The Commissary-General stated in his testimony that under his contract with Swift & Co. they guaranteed that the beef would continue sweet if properly cared for under cover in the shade for seventy-two hours after being removed from the refrigerator on the ship. Is that possible, do you think?

A. If I remember, one of the contracts I saw was "seventy-two hours after taken from the ship and taken into a refrigerator on the shore." That was to be good for seventy-two hours; but in the meantime some of the time was to be passed in the refrigerator on the shore, and if I remember the contract, and I only read it very hurriedly, as it did not apply to me at the time, I think it said, "shall be good for twenty-four hours after coming from a refrigerator on shore."

By Captain HOWELL:

Q. I think they said forty-eight hours?

A. I am not sure, but I think it was twenty-four hours. I think the beef will do that if it is properly protected.

By General BEAVER:

Q. In all your experience, Colonel, as commissary in the U. S. Army, have you any personal knowledge of the issue of any beef that was preserved artificially by the use of acids or chemicals of any kind?

A. No, sir.

Q. Excepting such as salt, saltpeter, etc.?

A. No, sir.

Q. If such issues have been made in Porto Rico, do you think it would have been possible for them to be made without your knowing or hearing something about it?

A. No, sir; I do not.

Q. Were any complaints made by the troops in Porto Rico of the fresh beef issued to them?

A. Yes, sir; of the native beef, and also complaints were made of the refrigerated beef. The complaints of the native beef were based upon the fact of their recent slaughter, and, as one of the officers stated, it was quivering when it was put on the fire, meaning it had been slaughtered so recently. And then there were complaints about the refrigerated beef, because they said it was spoiled when they got it. Those complaints came from both volunteers and some of the companies of regulars. I did not hear of the complaints in the regulars until we got to San Juan, when we took, as I said before, some beef from a vessel that had arrived there and issued it to two batteries of artillery and some of the companies of the Eleventh Infantry stationed at San Juan. The infantry companies, some of them, refused to accept it. The artillery knew more about it, and took it and came down the next day and tried to get more. There was nothing the matter with the beef; it was inspected by one of my commissary-sergeants, who reported it was excellent. The same thing happened that happens with all chilled or refrigerated beef; it turns or becomes discolored on the surface when exposed to the air.

Q. As one of the witnesses stated, a beard or a little mold?

A. Well, you would not notice it; it was very slight. The same thing had occurred at Camp Thomas. We had a large cooler there, and I put the meat back and issued it the next day. It was perfectly sound. This beef had been issued in the morning early and had been allowed to lie right in the sun until half past 11 or 12 o'clock, and then it was brought back to the commissary, and I happened to be there at that time, and the agent for the beef contractor asked me what to

do with it, and I said, "Give him some other beef," and the next day I told the agent to issue it out to some other organization, and if they objected, of course not to force it on them. I just wanted to see whether somebody else would take it.

Q. It requires a little experience then, in the issue of this beef, to know just how to handle it?

A. Yes, sir; in all the butchering places they do not keep the door of the cooler open at all; in most of them they have little windows, and they only open the door to put in the quarters of beef, and they take out the parts they are cutting from and put them in two little windows in front of the box, so the hot air is excluded from the box as much as possible. That is because it affects the appearance of the beef, not the quality.

Q. What experience have you with what is called canned roast beef, Colonel?

A. Well, we issued that as part of the meat component and the ration at Porto Rico.

Q. For what reason?

A. I found it aboard the vessels, and I made use of it, as I supposed the Commissary-General intended it as an emergency ration when we could not get the other, and I issued it about in that proportion. The usual proportion of meat ration is seven-tenths fresh beef, three-tenths bacon. I made it three-tenths bacon, three-tenths canned roast beef, and four-tenths fresh beef. This fresh beef, of course, would have to be obtained in the country. We could not obtain that from the *Massachusetts*. When we were going up to Cayey and San Juan we made arrangements with two gentlemen in Arroyo, from whom I had been buying our beef. I asked them if they could supply me with the fresh beef required all the way as far as San Juan. There were about 6,000 men in General Brooke's command, constituting the Second Brigade, First Division, First Corps, and then the battalion of artillery and a squadron also of cavalry, and the headquarters guard, about 6,000 men in all, and I estimated from what reports I could get that there were probably from twelve to fourteen thousand men on the island, possibly 16,000, and as I told this Mr. McCormick, the gentleman I was making the arrangements with, until we got to Cayey we would want 7,200 pounds a day, until we joined the other columns, when we would need 20,000 pounds. He said, "You can not get it." Therefore I made arrangements for canned roast beef, and we issued it in that proportion; and later on issued it in about the same proportion, sometimes a little bit more when asked for.

Q. When he made the remark that you can not get it on the island, was that on account of the scarcity of cattle on the island, or were they unavailable for use in that particular place?

A. No, sir; because they had been driven away in the mountains by the Spaniards, some of whom owned them. The cattle were not to be driven along unless absolutely necessary, until after we passed Cayey, but would be accumulated at various points to avoid heating the cattle by driving them.

Q. What was the character of this canned roast beef, Colonel?

A. Some of it was excellent. I used it myself in preference to the native beef obtained on the island. It was very much more tender, but it required more preparation than the other kinds of canned beef. In the first place, it had to be cooked, and then it was better when mixed with vegetables as a stew. There were complaints of the quality of it later on, and some complaints were forwarded to my office from some of the officers of the Nineteenth and Eleventh Infantry down at Ponce and up at Mayaguez, which I forwarded to Washington to the Commissary-General; but there was no uniformity of opinion in the matter, and those parties had been subsisting almost entirely on that beef. That was the expedition under General Schwan.

Q. You speak of some of it as being excellent.

A. Some was better than others; some packed by some of the houses was better than that packed by others.

Q. To what extent, if at all, did you find what was properly canned and hermetically sealed unfit for use?

A. I did not find any; none that I saw personally. There was a report came to me from the commissary at Mayaguez in which he said the heat was affecting the quality of the beef, and as there was a large quantity in excess of immediate wants on hand, I obtained permission to have it sold. I do not believe, from what I know of the process of canning, that it was anything more than some few cans that were spoiled.

Q. Defective in the first place?

A. Yes, sir; and those naturally spoiled all the rest of the bunch.

Q. Was this canned beef issued whether the troops wanted it or not—did you compel them to take it?

A. No, sir; not when they expressed any preference, and when it was possible to get them fresh beef; but sometimes it was the only thing we could give them.

Q. Then they took it in preference to having none?

A. Yes, sir; that was what the officers said who were opposed to it. They would take it in preference to none, but there were commands who had lived right along on it.

Q. You say you did purchase native beef whenever you could get it, and you had a contract for 7,200 pounds a day?

A. No, sir; I did not make the contract. That was in case we made the advance over toward San Juan. I said we would need to have that amount, then later we would need about 20,000 pounds. He said the 7,200 pounds he could get, but it would be impossible to get the other.

Q. You had money with which to buy cattle, I suppose?

A. Oh, yes, sir; I had about one-quarter of a million dollars.

Q. Do you know why, if that be the case, that the Commissary-General was asked not to send any more refrigerated beef to Porto Rico? Was that done by the Commissary Department or by an officer of the Army outside of the Commissary Department?

A. I am not sure, sir, whether I told the Commissary-General that on account of not having refrigeration it would be impossible to issue the beef unless from the vessel which was held there constantly. I suppose I recommended that no more fresh beef be sent down, because I could get the cattle on the island; and while not as good, we could get it up to the troops; and then there was also the difficulty at Arroyo that we had no transportation there. The command arrived there without any transportation whatever, and it was a problem how to get supplies to them at all. General Brooke asked me to make an estimate of the number of ox carts we wanted to go to San Juan, but they could not supply them from the country because they did not have enough carts.

Q. Have you any knowledge of the sending of this telegram, dated August 2, 1898, addressed to the Secretary of War, and signed, "Miles, Major-General:" "Please inform me how soon ample quartermaster and commissary funds will be available at this place. We are using native transportation and employing labor in unloading transports and storing supplies. Abundance of beef, cattle, coffee, sugar, and supplies of that character can be obtained in the country. Request that no more fresh beef be sent, as it can not be used more than a day from the coast," etc. The last part of this telegram does not apply to your case. You do not know whether this was sent at the request of the commissary department or not?

A. No, sir; certainly not at my request, because we had just landed at Arroyo on the 2d, and we had made inquiries at Ponce whether certain stores were available.

Q. Did you have a quarter of a million dollars of which you speak when you went there?

A. Yes, sir; I had a credit for it in New York.

Q. So you had a quarter of a million dollars available on the 2d of August, when you went there, for the purchase of supplies?

A. Yes, sir; I was detailed as chief commissary of the corps on the 18th of July, and I think I got that money about the 20th, before we left camp.

By General DODGE:

Q. What did you ascertain when you landed at Ponce about obtaining supplies?

A. I learned I could obtain coffee and sugar in limited quantities, and also that the officer at Ponce, Major Varnedoe, chief commissary of the First Division, had been obtaining fresh beef on the island.

Q. Do you know whether he had funds on hand himself?

A. Yes, sir; I do. He had about \$5,000, which, I think, was advanced to him before he left Charleston. It was advanced on my application to the Commissary-General.

Q. And he drew the funds from you?

A. Yes, sir; he could.

Q. You could supply him with all the funds he wanted?

A. I could not all he wanted, because that would have to be done by transferring, but I instructed them to send the vouchers to me for payment.

Q. He could purchase, and you would pay?

A. Yes, sir.

Q. Was the fund you had in your hands available at Ponce?

A. Yes, sir; all over the island.

By Captain HOWELL:

Q. And you had that fund in your hands when that order was written?

A. Yes, sir.

By General BEAVER:

Q. He had that before he left the United States?

A. Yes, sir. I had practically spent nothing from it up to that day. I think there was over a quarter of a million—\$260,000, perhaps.

By General DODGE:

Q. How long do you think the coffee and sugar on the island would supply your army?

A. Not very long, I think, sir, because the supply on the island was merely what was sufficient to supply the local market. In fact, at Arroyo I exhausted the market in the purchase of coffee, practically; they raised the price on me.

Q. They seemed to appreciate the fact that you were short?

A. The *Massachusetts* was on a rock down at Ponce, and we had to get some few things before she got up there.

Q. How did the prices at Porto Rico compare with the prices in the United States?

A. About the same with coffee. They would sell coffees there for about 15 to 18 centavos in Porto Rican money, and about that time, by an order from General Miles, our currency was accepted at the rate of 2 to 1, so the market price of coffee would have been about 8½ to 9 cents here. They claimed it was a very superior grade of coffee.

By General BEAVER:

Q. I take it that in that region the officers were compelled to a large extent to depend on what they could purchase from the commissaries for their personal arrangements?

A. Yes, sir.

Q. I ask you, not as an officer of the Commissary Department, but as an individual soldier, having had experience with refrigerated beef such as you know, and beef on the hoof such as you saw, and canned roast beef, in what order would you take them for your personal use?

A. I would take the refrigerated beef first, then the canned beef, then the beef on the hoof. I did it in that way while I was at Porto Rico. I could not, myself, get the refrigerated beef. I was not down at Arroyo, and while the beef passed through my hands and through the brigade commissary at Guayama, it was only on two or three occasions that I happened to have any of that beef, and that was while at Guayama lunching with the officers.

Q. Are you familiar with the labels of the cans?

A. Yes, sir; some of them; not all.

Q. Do you know whether they put the dates on the labels?

A. No, sir; I did not notice. I noticed the boxes, of course, but did not see any dates on those. The cans I saw in a general way on the shelves of the storehouses.

By General WILSON:

Q. In speaking of that issue of canned roast beef, you made the remark that you issued, under certain circumstances, more when asked for it; was it ever asked for?

A. Oh, yes, sir; I had one company of the First Kentucky that requested a full issue of canned roast beef, and some others requested it in a larger proportion than we had been issuing.

Q. You also stated that a certain proportion, more than could be issued, was left and you asked authority to sell it; was that sold at auction or private sale?

A. At public auction.

Q. To whom?

A. The natives.

Q. The price was what in comparison?

A. About 50 per cent discount, as I recollect. I would like to explain that the natives use that beef very willingly. They showed a very strong preference for it. It was very much better beef than any they could get.

By General DODGE:

Q. What is the comparative cost of beef in Porto Rico, such as you bought there, and the refrigerated beef?

A. Some of it was bought as low as $6\frac{1}{2}$ cents and some for 6 cents a pound. It ran from that up to—some of the proposals opened just before I left were for 20 cents.

Q. Their money or ours?

A. Our money. The prices had to be stated in our currency. The prices ranged between those figures, and the refrigerated beef cost not quite $9\frac{1}{2}$ cents; I think 9.47.

By General BEAVER:

Q. That is, delivered?

A. Yes, sir.

By General DODGE:

Q. What is the usual weight of refrigerated beef—the ox?

A. I don't know, sir.

Q. You give the weight of the Porto Rico cattle?

A. We do not accept anything less than 650 pounds, I think it is.

Q. Now, what is the proportion of waste between a beef weighing 400 pounds and one of 650 pounds—how much advantage is there in buying an ox of that weight rather than one weighing 400 pounds?

A. You get the advantage of a better quality of beef from the fat which is on it and the better condition of the animals. I do not know the actual proportion of lean.

Q. You don't know the percentage of advantage?

A. No, sir.

Q. You know there is a percentage?

A. Yes, sir; I don't know that it has ever been figured out.

By General BEAVER:

Q. The proportion of bone in a small carcass is much larger in proportion than in a large one?

A. Yes, sir.

By Captain HOWELL:

Q. Did you notice any of the beef issued to the Navy there?

A. No, sir.

Q. Did you ever issue any of the beef that was intended for the Navy?

A. No, sir.

Q. All of your beef was sent from the refrigerated beef intended for your army?

A. Yes, sir.

Q. Did you have any of it except that from the *Massachusetts*?

A. There was some sent on the *Manitoba*, but it did not reach me.

Q. That was used?

A. Yes, sir; I think so. The vessel never got to me.

Q. All the refrigerated beef that you got in Porto Rico was the same kind as used in these large cities?

A. Yes, sir.

Q. Identically the same and cooled by the same process?

A. Yes, sir.

By General BEAVER:

Q. Colonel, with your knowledge of the prices prevailing at the time you opened the last proposals, and with the fact that there is a larger proportion of bone in small quarters than in large quarters, would it have been to the interest of the United States Government to buy cattle on the hoof, or slaughtered on the island, in Porto Rico rather than to have taken the refrigerated beef which went from this country?

A. That would depend upon whether they had the means of handling refrigerated beef after its reception on the island, and also whether they had the means of properly cooling the slaughtered beef.

Q. I mean as to dollars and cents. As I understand it, Swift & Co. agreed to deliver beef in Porto Rico at 0.0947 cents per pound from the ship into their own cooling plant, which I understand is about to be erected or has been?

A. Yes, sir.

Q. With those conditions existing, would it have been to the profit of the United States to purchase the native cattle and slaughter them, and distribute the meat in that way, taking into consideration that the proportion of bones in the smaller quarters is greater than a large one, and taking into consideration your knowledge of the fact that the price of meat is going up, would it have been to the advantage of the United States to purchase native cattle rather than refrigerated beef?

A. It would have been to the advantage of the United States to purchase native cattle in the interior, because we could not ship refrigerated beef in there.

By Governor WOODBURY:

Q. On the coast?

A. It would have been to advantage to use refrigerated beef there.

By General BEAVER:

Q. The troops are posted in the cities to a considerable extent, are they not?

A. No, sir; they are in Ponce, Mayaguez, and San Juan, the largest cities, and also Arecibo. But they are stationed all over the island, about 25 posts.

Q. Do you know what they obtain for the native meat now?

A. No, sir; I did have a schedule made. The highest price, I think, in our money, is about 13½ cents a pound, and the lowest 5¼ to 6¼. I have forgotten exactly.

Q. Making an average of what—what is the average, the mean between the two?

A. No, sir; because the least amount might be bought in the smaller places, where the price would be the smallest.

By General DODGE:

Q. You have been in the habit of going into refrigerators where beef is stored, haven't you?

A. Yes, sir.

Q. You are thoroughly acquainted with the storage of it?

A. Yes, sir.

Q. Now, you take a refrigerator that has been six days from New York to Porto Rico; when you open the door, what is the odor?

A. It is a perfectly sweet smell of beef; that is all.

Q. Then when you take the beef out and expose it, what is the appearance of it?

A. It is just a pink color, but after it has been out three or four hours it commences to discolor.

Q. The beard raises on it, don't it?

A. I never saw that. All that I saw was covered with cheese cloth.

Q. That don't discolor the same way?

A. Oh, yes, sir; just the same; the cloth is very thin.

By Captain HOWELL:

Q. One of the witnesses before us, Major Harrison, testified to a fact, and I want to know if you think the same. He said if beef was killed so that the animal heat was never taken out it would commence to decompose at the bone, but this refrigerated beef would not commence there, but commence at the outside and go to the bone; and the refrigerated beef would have this mold, and, of course, if it was neglected and exposed for a long time, it would commence to decompose on the outside.

A. I think that is correct. You will notice on the quarters of this refrigerated beef that the first parts of it that commence to show any discoloration are the little thin places along the flanks, where the cold has become dispelled and the heat has acted upon it. By cutting that off sometimes the rest is all right.

By General DODGE:

Q. Don't you know that all butchers handling meat, to test its sweetness, test it at the bone?

A. Yes, sir; always.

Q. They run a skewer into it?

A. Yes, sir. At the camp we used to do it at the shoulder.

By General BEAVER:

Q. If, then, that native beef commences to taint at the bone, it is gone?

A. Yes, sir; it is.

Q. With that refrigerated beef you could cut it off?

A. Yes, sir.

By Colonel DENBY:

Q. When was Maj. John B. Black in Porto Rico?

A. He accompanied General Miles and left with General Miles.

Q. He was there with you?

A. At Ponce.

Q. Did he rank you?

A. No, sir.

Q. You ranked him?

A. Yes, sir.

Q. What was his position?

A. Commissary on General Miles's staff.

Q. You knew him?

A. I never met him until yesterday.

Q. He issued a very large quantity of this canned beef?

A. He had a large depot at Ponce for some time, and the issues were made from that.

Q. He issued nearly 100,000 pounds? Did you know anything about that?

A. No, sir; I think those issues were made to troops immediately under General Miles's command.

Q. Did you know that nearly every officer in General Miles's command condemned that beef?

A. No, sir; I got those reports, as I said a few moments ago, from the Eleventh and Nineteenth Infantry.

Q. Did you know Major Baker, of the Fourth United States Infantry?

A. No, sir.

Q. Did you know Lieutenant-Colonel Miner, of the Sixth Infantry?

A. No, sir.

Q. Colonel Powell, of the Ninth Infantry?

A. No, sir; those officers were not in Porto Rico.

Q. I have a list of officers here who are reported to have reported that this canned meat which was issued to the men at Porto Rico was absolutely worthless in every respect. They say it was of inferior quality and unpalatable, and the men could not eat it. "It is utterly unfit as an article of diet and produces stomach disorders, and 'nasty' is the only term that will fitly describe its appearance." A part of this was at Porto Rico and a part at Cuba?

A. Yes, sir; those you mention were none of them in Porto Rico, I know.

Q. Colonel Smith, of the Thirteenth Infantry?

A. Only the Nineteenth and Eleventh regulars were there, and a few troops of cavalry and some regular batteries.

Q. Let me read over the names. Major O'Brien, of the Seventeenth Infantry?

A. He was not there.

Q. Capt. J. W. Duncan, the Twenty-first Infantry, Second Battalion?

A. Not there.

Q. Major Van Horne, of the Twenty-second Infantry?

A. Not there.

Q. Major Jackson, of the Third Cavalry?

A. Not there.

Q. Colonel Haskin, Second Artillery?

A. Not there.

Q. Lieutenant-Colonel McCrea, of the Fifth Artillery?

A. Not there.

Q. Captain Best, commanding a light battery?

A. I do not know about that. What battery was it?

Q. Battery K, First Artillery.

A. Not there.

Q. The commanding officer of the First Cavalry, Brigadier-General Viele?

A. Not there.

Q. Officers of the Ninth Cavalry?

A. None of them.

Q. Commander of the Twenty-fourth Infantry?

A. Not there.

Q. That is a rather important fact, and I would like you to be certain about it, whether these people were there while you were.

A. They were not there unless on General Miles's staff. They were not with their commands.

Q. They are commanding officers?

A. Yes, sir.

Q. This says, "Officers in Porto Rico and Cuba." These gentlemen say it was absolutely worthless, and the impression given is at Porto Rico. Now, did you go to Porto Rico with General Miles?

A. No, sir; with General Brooke.

Q. Had General Miles left?

A. No, sir; he was at the island when we arrived and left, I think, the 1st or 2d of September.

Q. "Major Black, Chief Commissary Subsistence, United States Volunteers, commissary at headquarters of the army in the field during the expedition to Porto Rico, 1898," and he reports, as I said, over 100,000 pounds of this meat issued. Now, was that done while you were there?

A. While I was on the island.

Q. Where was this canned beef issued?

A. It must have been at Ponce.

Q. But it was not issued to any of these officers or their commands, because they were not there?

A. They were not there.

Q. Then it is quite difficult to understand why this report comes from the General Commanding the Armies of the United States, which reports "roast beef issued in Porto Rico and Cuba both," on the reports of these officers, and you say none of these officers were there?

A. No, sir; it must have been a clerical error.

Q. The facts that I want to get from you are especially whether you were there in Porto Rico when Major Black issued this 100,000 pounds of canned beef?

A. I do not know what quantity he issued; I was there when he issued what he did.

Q. You remained there as long as Major Black?

A. Yes, sir; until the 21st of December.

Q. Who did he report to, anybody?

A. I do not know of anybody except the Commissary-General.

Q. Do you know anything personally in regard to this issue by Major Black?

A. No, sir; nothing.

Q. You do not know whether he issued it or not?

A. No, sir.

Q. None of the officers named in this paper, according to Colonel Sharpe, were in Porto Rico, although the heading reads "Cuba and Porto Rico." The list is a list of commanding officers. Could you explain how it is that they have this opinion about this canned meat?

A. There was a difference of opinion about the beef. Some of the officers of General Brooke's staff tried it, and they didn't like it. I preferred it, as I say, to native beef.

Q. "It presented such a repulsive appearance that the officers and men turned away from it in disgust; 'nasty' is the only term for it."

A. I can not say about it. The appearance is altogether different from the corned beef, which is pressed before put in cans. You take the roast beef, and it is put in the can practically loose, and the result is the fat and other oily matters

come to the top, and it is not pleasing to the eye when opened, especially in a hot country, but aside from that there is no chemical change.

Q. When did you first receive canned beef?

A. At Arroyo.

Q. I want to know when you first received it.

A. I have had it at posts when I was post commissary.

Q. Where?

A. I remember at West Point, where I was stationed from '84 to '89.

Q. And this canned beef was sent to you?

A. It was kept there for issues under certain circumstances, and for sale to officers.

Q. Did you issue it?

A. I do not remember of issuing any. It was only issued at that time for men traveling.

Q. How long ago were you at West Point?

A. I left in '89.

Q. After that did you come across the tinned or canned beef in any way?

A. Not the roast beef. I bought large quantities of the corned beef.

Q. That don't seem to be objected to?

A. I never bought any of the roast beef.

Q. You call it roast beef. Is it roasted or boiled?

A. It is labeled both.

Q. Where did you next come across it?

A. Down at Arroyo.

Q. You had never really issued it before?

A. No, sir.

Q. Was it in the nature of an experiment, or what?

A. Oh, no, sir; it is used in foreign service largely by the French and English, both, and it is used as an emergency ration the same as we used it in this campaign.

Q. Major Black reports here that he received of 1-pound cans, 12,604 pounds; 2-pound cans, 86,292 pounds, and 6-pound cans, 2,220 pounds, and it appears that he issued a large part of these, and then he reports here that he transferred 12,630 pounds. What does he mean by that?

A. He turned over his stores to Captain Pomr y.

Q. Who succeeded him?

A. Yes, sir.

Q. What time was that?

A. Some time in August; I think along about the 25th; I am not positive about that.

Q. Then he reports 44,124 pounds of 4-pound cans transferred.

A. I did not see any 4 or 6 pound cans.

Q. The word "transferred" here means not issued?

A. Yes, sir.

Q. Had you anything to do with this Major Black?

A. No, sir.

Q. He didn't report to you?

A. No, sir.

Q. You don't know, then, officially, how many pounds of that canned meat that these gentlemen complain of was issued by Major Black?

A. No, sir.

Q. This large amount that was transferred, do you know where it is now?

A. Some of it was subsequently issued, I suppose, at Ponce, and some of it was sold at auction, I think, there, and I think the balance has been shipped.

Q. How many troops were in Porto Rico at the time Major Black was there as commissary of subsistence?

A. I think about 16,000—6,000 at Arroyo, and the balance of 10,000 or so was supplied from Ponce.

Q. About how many rations were issued for seven days?

A. One hundred and twelve thousand rations, which is equivalent to 84,000 pounds of canned beef.

Q. That is for what length of time?

A. For a week, or take it in the way we issue it, that is three-tenths bacon and seven-tenths beef, that would be seven-tenths of the entire component of meat for ten days.

Q. Then, if 84,000 pounds of this beef was issued during the entire time, that would represent a very small proportion and would carry out your idea of an emergency ration?

A. Yes, sir.

By General BEAVER:

Q. In brief, state, if you please, whether in quality and quantity the rations were equal in the late war to what had been issued to the Regular Army previously?

A. In quantity, perhaps not. The quality was perhaps as fine as was ever issued.

By General DODGE:

Q. There was a complaint of the rations in Porto Rico?

A. Not from the regulars, I think.

Q. No; I speak of General Miles, in his testimony, who speaks of all the rations being inferior. How much of this refrigerated beef that was sent there was condemned, that you know of?

A. I do not know of any issued that was condemned.

Q. Do you know of any great loss of refrigerated beef that was sent down there?

A. Merely by hearsay. I heard of some sent back and afterwards thrown away. I do not know whether aboard the *Massachusetts* or *Manitoba*.

Q. You do not know the amount?

A. No, sir; the *Massachusetts*, when it left Arroyo, was short of ammonia for refrigerating, and I advised the captain to go down to Ponce and endeavor to get some of it there, and he was unable to obtain it of the quality they required.

Q. For freezing?

A. Yes, sir.

Q. Therefore what was lost was on account of the inability to keep it refrigerated?

A. Yes, sir. He expected to obtain some at Santiago.

Q. Whose loss would that be?

A. Under the contract I think that was the loss of the contractor.

Captain HOWELL. And not of the Government?

The WITNESS. No, sir.

By General BEAVER:

Q. Was any time fixed in the contract at which the beef was to be unloaded at the point of destination?

A. No, sir; not that I remember.

Q. So they would have to keep it aboard until unloaded?

A. Yes, sir.

By General DODGE:

Q. How long has refrigerated beef been issued, to your knowledge, to troops?

A. Well, I don't remember. There were some bids made on it and I supplied

it at West Point previous to 1889. Not the native beef, but beef slaughtered in New York State. That was refrigerated beef practically, but they made a distinction between the Western beef and the New York beef.

Q. Has there been any complaint since you have been in the department as to the character and quality of refrigerated beef?

A. No, sir; none whatever. The butchers have made this same little contention when a contract came up. I remember the man at West Point who was slaughtering beef contended that his beef was better than the Chicago dressed beef, but we did not find anything of that kind at all. I remember the Chicago beef was the lowest in price. You could not notice any difference in quality.

Q. What is being issued to the troops in Porto Rico now?

A. They have at San Juan and Ponce refrigerators put up by Swift & Co., and just before leaving there I communicated with the depot quartermaster and recommended that he have the railroad provide a car suitable to carry this beef up to Arecibo and up as far as Carolina, and from Ponce to Yauco. But they had received none up to the time I left.

Q. Do you know whether they were killing beef to put into these refrigerators, or whether it went from the United States?

A. Oh, no, sir; it was sent from the United States.

Q. They are sending it now?

A. I believe they are. Two vessels were going to carry it down. But I only know by hearsay.

Q. Have you any statement or suggestion to make yourself, anything that we have not questioned you about, that you desire to say?

A. In regard to the beef?

Q. Yes, sir; or anything in your department.

A. No, sir; I have no statement to make, except that I think any complaint about the quality and quantity of the ration is made by those having no experience in handling the ration, and it is admitted to me by the volunteer officers that it is due to the fact that they were inexperienced in the care of the rations issued to them. One of the officers said to me coming up that that was where the regulars showed their superiority over the volunteers.

Q. This complaint is by the regulars?

A. I mean of the ration as a whole. I heard no complaint from the regulars except about that canned beef.

Q. Don't you think it depends upon whether they have salt and pepper to go with it?

A. Yes, sir, and vegetables; but in the field they don't have that.

Q. This is really issued, where they can not have the vegetables, as an emergency ration?

A. Yes, sir. There were some experiments made of a ration devised by Colonel Weston, of the department, which was intended to combine both the fresh meat and fresh vegetables, somewhat in the proportion of a stew, with onions and potatoes in it, and that that I tried was excellent.

Q. That was not a success?

A. Yes, sir. Some was sent to me at the camp, and I sent it to some of the officers to get their opinion. It combined both vegetables and meat.

Q. Your department is experimenting now, is it not, with an emergency ration?

A. Not now; at least, I have heard nothing of it.

By General BEAVER:

Q. This canned roast beef, as I understand it, is not either roasted or boiled; it is simply steamed to a sufficient limit to eliminate the air, and it must be cooked sufficient to make it palatable?

A. No, sir; it is cooked more than that. It is cooked twenty minutes before it

is put into the can, then the processing is done and a little vent made in the top to let out the air, and sealed instantly.

Q. The corned beef is subjected to an hour and a half's cooking, after it has been in a vat for a month or so; but I did not understand that this fresh beef was cooked as long.

A. I understand it was cooked in these large steam caldrons that they have in all the large houses for cooking, and afterwards put in a process to drive out the air.

Q. As a matter of fact, in order to make it palatable it must be cooked a second time?

A. Oh, yes, sir; it is not as palatable cold as corned beef. It does not come as fresh beef does, so you can slice it off, which makes that so delicious.

WASHINGTON, D. C., *January 7, 1899.*

TESTIMONY OF MAJ. JOHN D. BLACK.

Maj. JOHN D. BLACK, being duly sworn, testified as follows:

By Colonel DENBY:

Q. Will you please state your name, your rank, and where you have been recently employed?

A. John D. Black, major and chief commissary of subsistence, and at the headquarters of the Commanding General.

Q. Now, will you state at what point you were stationed during the recent war?

A. I went with the general headquarters from Washington to Santiago, and from there with the expedition to Porto Rico.

Q. When did you get to Santiago, Major?

A. On the 11th of July.

Q. On the 11th of July?

A. Yes, sir.

Q. How long did you stay there?

A. We remained there until the 21st—that is, not all the time at Siboney, but part of the time at Guantanamo, as the harbor was much better there, while the expedition was being arranged for Porto Rico.

Q. What duty were you on there?

A. As chief commissary of subsistence.

Q. Where were you stationed—at what place?

A. On our arrival at Porto Rico, do you mean?

Q. No; I mean at Santiago.

A. I was not stationed there. I was aboard the *Yale*, on which General Miles and staff went on this expedition.

Q. Had you any duties pertaining to your position at Santiago?

A. Not at Santiago.

Q. You did not land in Cuba?

A. No, sir.

Q. You know nothing about the supplies furnished the troops at Santiago, nothing officially?

A. No, sir.

Q. You had nothing to do with that?

A. No, sir.

Q. You were on General Miles's staff?

A. Yes, sir.

Q. You did not go on shore?

A. We were quarantined and not able to.

Q. And you went to Porto Rico with General Miles?

A. Yes, sir.

Q. Then you are unable to give us any information about the character of the supplies at Santiago?

A. I am unable to do so.

Q. You had absolutely nothing to do with them?

A. Nothing to do with them, sir.

Q. When you sailed from Santiago, what ship did you sail on?

A. The *Yale*.

Q. Was General Miles and his staff aboard the *Yale*?

A. They were.

Q. And where did you go?

A. Well, we landed at—those Spanish names I can not remember—on the south side of the island, at Guanica.

Q. You went ashore at Guanica?

A. Yes, sir.

Q. Were troops debarked there?

A. They were.

Q. How many?

A. General Garrettson's brigade and Colonel Black's provisional battalion of engineers, with a number of batteries.

Q. About how many troops—

General WILSON. What was the date?

Q. (Continued.) The date, if you can give it to us?

A. The 25th—the 24th.

Q. The 24th of July?

A. No; the 25th of July we arrived at Guanica.

Q. How many troops did you debark there, Major?

A. I am unable to say. Perhaps there were—indeed, I can not give any definite answer as to that.

Q. Did you go ashore yourself?

A. I did, sir.

Q. And did you open your headquarters there?

A. There were no headquarters opened there. Perhaps it would be well for me to explain a little further; the board would understand the situation better. On the 23d of July I was appointed an acting assistant quartermaster (see following Special Field Orders, No. 3) with instructions to take charge of the transports and see to their unloading and disposal of the various supplies, quartermaster's stores and everything of that kind that was contained on the vessels. This, in addition to my other duties and the labors connected with them, was so arduous that on the 2d of August Captain Pomroy, a commissary of subsistence, was ordered to report to me, which he did, and was appointed depot commissary at the city of Ponce. On the 28th of July the expedition moved from Guanica to Ponce, which was made the depot.

Special field orders No. 3.

HEADQUARTERS OF THE ARMY,

ON BOARD U. S. S. YALE,

En route for Porto Rico, July 23, 1898.

Par. 1. Maj. J. D. Black, chief commissary of subsistence, United States Volunteers, is hereby appointed an acting assistant quartermaster. He will take charge of the unloading of all the property and supplies on board the transports and will

see to their proper distribution and storage, and will transfer from the U. S. S. *Yale* the property of Brigadier-General Duffield's brigade to the *City of Macon*.
 * * * After the transports are unloaded and ready for sea, he will give the necessary orders, directing them to proceed to their destinations.

By command of Major-General Miles:

J. C. GILMORE, *Brigadier-General*.

Maj. J. D. BLACK,

Chief Commissary of Subsistence, U. S. V.

Q. Will you tell us where Ponce is?

A. On the south side of the island, about 20 miles from Guanica.

Q. How far from the sea?

A. The playa, as they call it—the wharf—is on the sea, or a fairly inclosed harbor. The city of Ponce is 2 miles distant, but the headquarters were at the playa, or on the wharf.

Q. You stated that, I suppose, to give us to understand that Captain Pomroy was in charge of some of the commissary duties?

A. Depot commissary.

Q. He was under you?

A. Yes, sir.

Q. You were chief commissary?

A. Chief commissary.

Q. Now, when you went to Porto Rico, did you take any supplies?

A. Yes, sir.

Q. What?

A. A large amount of commissary stores, quartermaster stores, and ammunition.

Q. Where did you take them from—what port in this country?

A. From—they were gathered together at Guantanamo Harbor, in Cuba, and sailed with this expedition.

Q. Some came from Tampa, I suppose?

A. Yes, sir; some from Tampa, some from Newport News, and Charleston—General Garrettson's brigade.

Q. What was the character of the supplies?

A. The commissary supplies were very good.

Q. Did you pay any attention, before you got to Porto Rico, to the meat?

A. I did not.

Q. Did you have refrigerated beef or canned beef with you?

A. We had an abundance of canned beef; there was no refrigerated beef.

Q. You took no refrigerated beef with the expedition to Porto Rico?

A. No, sir.

Q. You mean now the whole of the island?

A. I was speaking of that portion of the expedition that landed at Ponce. There was a portion of the expedition, under General Brooke, that landed at Arroyo, of which I had no personal knowledge.

Q. Then there were two expeditions?

A. Yes, sir.

Q. One under General Miles, personally, and you were with that?

A. Yes, sir.

Q. And the other under General Brooke?

A. Yes, sir.

Q. You know nothing about that?

A. No, sir.

Q. With regard to your expedition, whose business was it to see that the supplies were proper and good?

A. Naturally of the depot commissary and chief commissary.

Q. You were the chief commissary?

A. Yes, sir.

Q. Then it was your business to know the character and quality and kind of supplies?

A. Yes, sir.

Q. Now, in the exercise of that duty, did you make an examination?

A. I did.

Q. Did you find out what the quality, kind, and character, and so forth, were?

A. I did.

Q. What was it?

A. Very good.

Q. Did you have any refrigerated meat under you at that time?

A. On the 10th of August a vessel arrived, the *Manitoba*, with quite a large supply of refrigerated beef. Unfortunately, in getting into the harbor she ran ashore on the reef out near the light-house, about two miles and a half out—

General WILSON. Was not that the *Massachusetts*?

The WITNESS. No, sir; she came also and ran onto this reef earlier. If you will kindly let me go into the other room I can get data and give you the dates better.

Q. Take your own course, Major.

A. (After returning with papers.) You were speaking of the *Massachusetts*; I would say that on August 2 the *Massachusetts* arrived.

Q. That was a transport?

A. That was the first one; on August 2. On her there were a large number of troops and over a thousand horses. This vessel went on this same reef. The troops were disembarked and the horses taken off, and then this vessel was warped off and went to General Brooke at Arroyo, to whom she was originally consigned, and aboard her it was reported there were 250 tons of fresh beef.

Q. That went to Arroyo?

A. Yes, sir; the troops and stock being taken off at Ponce. Then on the 10th of August the *Manitoba*, a large transport, arrived and went on this same reef; and on this vessel there were two troops of cavalry—Sheridan's and Governor's troops—and Batteries A and C, Pennsylvania Artillery, and 711 horses and mules. These were taken off, and the vessel was then warped off the reef and brought into the harbor. We were four days, I think it was, in unloading her. There was a high sea on at the time, and it was with a great deal of difficulty that we could sling the horses and get them down into the lighters that it was necessary to use in order to tow them in to the wharf. And on this vessel were 1,755 quarters of fresh beef.

Q. Now, can you tell us how that beef was kept aboard that vessel; was it in a refrigerator or what?

A. It was in a refrigerator and controlled by chemicals, so I was informed, and not by ice.

Q. What do you mean by "controlled by chemicals"?

A. I am unable to give you the process.

Governor WOODBURY. The ammonia process?

General DODGE. Do you mean it was kept cool by chemicals and not by ice?

The WITNESS. Yes, sir.

Q. Did you go aboard that ship?

A. I did, sir.

Q. Did you inspect this beef aboard that ship?

A. I did not.

Q. You did not see it?

A. I saw portions of it, but I did not inspect because in opening the tanks in

which this meat was contained the temperature would rise very quickly. I saw some of this beef which was taken ashore.

Governor WOODBURY. Colonel Denby, let us have it understood right there; it may be a little cloudy. We want it understood whether he means "controlled by chemical process" to mean that the meat was cooled by a process known as the ammonia process of cooling—

General WILSON. Or whether he means chemicals had been applied to the beef proper.

The WITNESS. It was a process of keeping the meat cooler.

General WILSON. Simply to cool the air?

The WITNESS. Yes, sir.

Q. It was simply to produce cold, and known as the "ammonia process?"

A. Yes, sir.

Q. And the chemical was not applied to the meat itself?

A. No, sir.

Q. You did not mean by the use of the word "chemicals" to imply that chemicals had been used on the beef?

A. No, sir; that was not my intention.

Q. Now, will you tell us what happened to that beef?

A. Perhaps if I followed the history of that vessel it would give you a better idea. This vessel was brought in on the 14th—

By General McCook:

Q. Of August?

A. Of August [continuing above interrupted answer]. The camp and garrison equipage belonging to the troops, and their supplies, were then taken off the vessel, and on the 18th she was sent outside with a gang of stevedores to be cleaned up; that is, for the manure and everything of that kind to be cleaned off the vessel—we did not like anything of that kind dumped off into the harbor. The vessel was sent outside on the 18th, and returned on the evening of the same day, 18th. On the 19th, on the morning of the 19th, I received a telegram from Davison, depot quartermaster at Mayaguez, which is on the west side of the island, near where General Schwan's brigade was, "Must have the following supplies as soon as possible: Clothing for 1,500 men," and giving a long list of supplies, that is, commissary supplies, to which I replied, "Send transportation and goods called for will be delivered." On the 20th the following telegram was received: "General Gilmore, Ponce: Necessity for prompt supply of clothing, forage, and flour, or hard bread, for this command most urgent. Many men barefooted and shirts are rotting on men's backs. At most, only three days' forage and six days' supplies of breadstuffs remain on hand. Supplies must be brought here by transports. Our transportation is taxed to the utmost in carrying supplies to troops in the mountains. Our draft animals are in poor condition. Please read the above in connection with telegram sent to-day by Major Black to Captain Davison, my quartermaster," which was to send their transportation and these stores would be furnished.

By General WILSON:

Q. Who signed that telegram, please?

A. Schwan—General Schwan.

By Colonel DENBY:

Q. To what point was the telegram sent?

A. To General Gilmore, at Ponce.

By General WILSON:

Q. In that request for supplies was there any request made for beef?

A. No, sir; no request for beef; but on board this *Manitoba* the supplies had not been unloaded. We had simply been able to get off the camp and garrison equipment and guns that belonged to the troops that came down on the *Manitoba*; and it was reported to me that there were 400,000 pounds of officers' stores which were consigned to Colonel Sharpe, who was General Brooke's chief commissary. It is hardly necessary for me to particularize, but there were a large number of supplies on board the *Manitoba*.

Q. You had refrigerated beef?

A. 1,755 quarters.

Q. Fresh beef?

A. Yes, sir.

Q. And how much tinned or canned beef?

A. 2,640 cases of roast beef.

Q. How much to the case?

A. It don't mention here; ordinarily it was 2-pound cans.

Q. How many to the case?

A. Twenty-four of those; 2,813 cases of corned beef. They were the same issue.

By Colonel DENBY:

Q. Now, what was done with all those supplies on board that ship?

A. On the 21st she was supplied with water, as her water supply had been exhausted, and on the 19th to 22d transferred from the *Mississippi* a large supply of bacon, flour, and forage.

Q. We do not specially care about the amounts.

A. There was a large supply of flour and bacon on board the *Mississippi* that was transferred to the *Manitoba*, and on the 22d she was ready to go to Mayaguez. At this time Colonel Pullman, on board the *Rita*, a quartermaster, arrived with clothing, and the *Manitoba* was held two days longer to procure this clothing. General Schwan stated in his telegram of August 20 that "at most only three days' forage and six days' supply of breadstuff remain on hand," and as the time was about to expire the *Manitoba* was ordered to sail on the 24th. But as the time stated for the supply of things on hand had elapsed, the *Manitoba* was sent away on the 24th, and the *Alamo*, another vessel with supplies, containing certain component parts of regular rations, the component parts needed to complete the others, with this clothing, was sent to Mayaguez on the 26th.

Q. To what commissary did it go there?

A. Davison was the quartermaster, and Alexander brigade commissary. These two vessels were also to supply General Garretson's brigade, which lay near Arecibo, on the north side of the island, and through the courtesy of the Spanish commander at that port we were allowed to land supplies, and General Garretson was allowed to come with his train and commissary and receive the supplies at Arecibo.

Q. Now, we want to trace this beef and find if anything was the matter with it. Can you tell us anything about that?

A. This vessel—no, sir, I can not; I was relieved before the vessel returned to Ponce.

Q. Do you know what became of it?

A. It was on board the vessel for delivery at Ponce.

Q. Do you know whether it was delivered?

A. I was informed it was delivered.

Q. Both the refrigerated and the canned beef?

A. Yes, sir; so I got from a report.

Q. Do you know anything of the quality or condition of that beef when it was delivered?

A. I do not.

Q. Or do you know anything of its condition after it was delivered?

A. No, sir; only what I knew of that which was taken off at Ponce, as we had a few troops there.

Q. State now—you say some was delivered at Ponce?

A. Yes, sir.

Q. From the same ship?

A. Yes, sir; and some of that appeared of good condition. It had a bright pink color.

Q. Did you see it?

A. Yes, sir. I delivered some to vessels in the harbor that had convalescents and sick aboard. That I had personal knowledge of. On looking over my memoranda I find, under date of July 31, 5 tons of ice transferred from the *Mobile* to the *Lampasas*, then used as a hospital ship, and it was at this time that the refrigerated beef was taken in my rowboat to the vessel in the harbor having sick aboard. The *Mobile* had, in addition to the Sixteenth Pennsylvania Volunteer Infantry and two companies Sixth Illinois Infantry, a large supply of medical and hospital stores for General Shafter's command; and it was by Dr. Greenleaf's order these stores were transferred to the *Lampasas*.

Q. Can you tell us how much of this beef came under your personal knowledge at Ponce; how many pounds?

A. No, I can not; I made no special note of that.

Q. About how many?

A. I can only be governed by the report of Captain Aspinwall.

Q. Who was he?

A. He was the officer in charge of the supplies on board the *Manitoba*. He reported on his arrival 1,755 quarters of fresh beef, and when I went aboard the vessel on the 20th to obtain a report of the forage and supplies he then had aboard suitable to send to Generals Schwan and Garretson he reported then 1,455 quarters of beef.

Q. Do you know what he had done with the balance?

A. I do not.

Q. What did he do with the 1,455?

A. That was the beef sent to Mayaguez and Arroyo to supply General Schwan's and General Garretson's brigade.

Q. Tell us what part of this beef you know anything personally about.

A. Simply the beef that was taken to certain vessels lying in the harbor, on which there were sick and convalescents.

Q. Did you see that beef?

A. Yes, sir; I took it in my rowboat.

Q. What was the character of it?

A. Some of the beef was very fine in appearance, and other quarters were spotted and discolored.

Q. About how many were spotted and discolored, compared to the whole?

A. A majority were discolored to a certain extent.

Q. Now, when you say "discolored" what do you mean?

A. Beef in its natural condition has a bright pink color. This was of a brown, rather muddy, color.

Q. Was there a mold on it?

A. There was, as will be on all refrigerated beef when brought out of cold storage.

Q. Why is that, Major?

A. I do not know, sir.

Q. Was this beef covered with a cloth?

A. No, sir; that that I took to the vessels was not covered with a cloth.

Q. Did you not know that if the mold was scraped off with a knife the beef beneath would be good?

A. I have been so informed.

Q. You delivered this beef for the sick people?

A. Yes, sir; on board the transports.

Q. And you thought it was good?

A. Yes, sir.

Q. Otherwise you would not have delivered it?

A. Otherwise I would not have delivered it.

Q. You delivered that beef with spots the same as the other?

A. Yes, sir.

Q. You did not regard the spots as indications of its being bad?

A. No, sir.

Q. You thought when you scraped that off it would be all right?

A. Yes, sir; I had confidence in the reports of the surgeons.

Q. Major, tell us if any bad or spoiled beef came under your eyes in Porto Rico.

A. There was none.

Q. And you say all the beef was good with the exception of this which was spotted?

A. With the exception of this discoloration.

Q. And these spots did not so affect the beef as to induce you not to deliver it to sick people?

A. No, sir.

Q. Did you eat that beef yourself?

A. I did not.

Q. What kind of beef did you eat?

A. I ate the native beef.

Colonel DENBY. Gentlemen, I suppose we will take up the refrigerated beef first and the canned beef afterwards.

By Captain HOWELL:

Q. Did you notice as to whether that beef had been treated chemically or not?

A. I know nothing about that.

Q. You did not see anything that led you to believe that?

A. There was nothing I saw to lead me to believe that.

Q. Did any officer report to you that it was chemically treated?

A. No, sir.

Q. It was refrigerated beef; just such as is sold in the cities?

A. It is refrigerated beef, and came there in cold storage.

Q. And that is all you know about it?

A. Yes, sir.

Q. And the doctors made no objections to giving it to the sick people?

A. As to that I do not know. It was delivered when we could not get other beef. I will say this: It was reported to me by some of the nurses that they preferred the native beef because it made better beef tea.

By Dr. CONNER:

Q. Do you know as to the kind of meat that was likely to make the best beef tea—whether it was the rich fat meat or the very lean meat?

A. I have no means of knowing that. I simply repeated what was reported to me by the nurses.

Q. Did you have occasion to cut through any of these spots to see the condition of the meat beneath?

A. I did not, sir.

By Governor WOODBURY:

Q. Did you at any time while you were upon the island of Porto Rico handle any beef or know of any beef that you believed to be chemically treated for the purpose of preserving it?

A. Not that I am aware of. I would not know, in fact, whether beef was chemically treated unless—I had no means of knowing.

Q. Did you have any suspicion that that beef had been chemically treated for the purpose of preserving it?

A. I had not.

Q. Did any reports come to you of beef that was chemically treated?

A. They did not. I will say in explanation of that that very little of this beef passed through my hands, as I stated, and my duties as acting assistant quartermaster were such as to cut me off entirely almost from the commissary department. Captain Pomroy was a very efficient officer, and to him was left entire charge of the commissary department, and I supplied him in the depot with the goods used there.

By Colonel DENBY:

Q. You did that as commissary?

A. Yes, sir; and in compliance with the order appointing me assistant quartermaster, which was to take charge of the unloading of the transports and see to the distribution and storage in the city on the playa.

By Governor WOODBURY:

Q. Please state whether or not the fact that some of this beef was discolored would not be an evidence that it had not been treated chemically for the purpose of preserving it in its original color and condition.

A. I have never had any experience with treated beef, consequently I do not know that my opinion would be of any weight. My knowledge of beef goes more in the raising of the animal than in the care of it afterwards.

By General McCook:

Q. Were you in the harbor of Ponce when the steamer *Panama* left there with convalescents?

A. I was not. I was relieved on the 22d of August.

Q. You know nothing of the nature of the beef that was put on board that vessel?

A. No, sir; only that it came from this *Manitoba*, which came on the 31st of August.

Q. Do you know that it was refrigerated beef that was on that *Panama*?

A. I do not; from the fact that I was relieved some time before that.

By Dr. CONNER:

Q. Who would be commissary of subsistence who would know about the beef that was put on the *Panama*?

A. The depot commissary at the playa, who at that time was Captain Pomroy.

By Colonel DENBY:

Q. Major, how long have you been a commissary?

A. Since the 3d of June, when I was appointed.

Q. What was your position before that?

A. I was farmer in North Dakota.

Q. Then as a farmer you know a good deal about beef?

A. I have been raising beef for the market for a number of years.

Q. Can you give us any idea as to how any contractor would be benefited by putting chemicals on refrigerated beef?

A. I can not, unless it would be to preserve the beef.

Q. As I understand, the beef is sent in a refrigerator ship; it goes ordinarily through a refrigerator on shore, and it is delivered from the refrigerator on shore to the men who are going to use it?

A. Yes, sir.

Q. Now, if you have any opinion you can give us on that subject as to how any human being can be benefited by treating that beef chemically, which requires another and greater expense, I would like to have it?

A. The refrigerated beef that came to Ponce—I only know of that—came there in the holds of vessels. The temperature was very high—I am not speaking of in the hold where the meat was, but the natural temperature. I saw them take a test of the water drawn up on the *Yale* a day or two before we arrived in Ponce; it was 84. We had no facilities on the wharf for keeping this beef; we had no cold storage, neither could we get ice.

Q. Then you did not have good beef?

A. And the beef was on the vessels and must remain there until we had a chance to issue it in a very short time. Now, chemicals being added to this might have prevented the decay of this when brought out into the air. My experience of cold storage is, that any meats or vegetables held in cold storage will decay very quickly when brought into the air.

Q. Can you tell us what chemicals you think would do that?

A. No, sir; I have no means of knowing.

Q. You have already given it as your opinion that there were no chemicals used on that beef you saw?

A. No, sir; I beg pardon; I have no means of knowing.

Q. You have already given us the statement that you gave it to the sick and other people?

A. Yes, sir.

Q. Therefore, you did not suppose there were any chemicals on it?

A. I believed the beef was good.

Q. Now, Major, I want to take you on the subject of canned beef. Do you know anything about that?

A. There was a large amount of this canned beef that came.

Q. A large amount of what?

A. A large amount of canned roast beef that came; there was 198,508 pounds received in the depot.

Q. At what point?

A. Ponce.

Q. How many thousand?

A. 198,508 received from all sources; that is, brought on shore. Now, a large amount of this remained on the ships when I was relieved, and that we had not been able to unload.

Q. Were you in charge in Ponce?

A. Indirectly. Let me state the peculiar conditions existing: Captain Pomroy was appointed depot commissary; he was energetic and a hard worker; but he had an idea that no issues could be made unless proper invoices and receipts were taken, as is the case in all garrisons. We were there without any papers whatever; that is, had no blanks. The troops were landed and it was necessary they should have their supplies. I ordered him to issue and take memorandum receipts, and I would become responsible that no harm should come to him by reason of issuing and not taking the receipts prescribed by the department; and the issues were made in that way. I do not think there were half a dozen issues made while I was there—I left on the 22d of August, and I do not think half a dozen were made on the regular blanks of the department. Memoranda were taken on brown

paper—brown wrapping paper. The emergency required this; I took the responsibility; consequently, they were all made in my name. The depot commissary took them in my name.

PORT PONCE, *August 31, 1898.*

I hereby certify that on the 2d instant by memorandum order I was relieved from duty as commissary of First Brigade, Second Division, Fourth Corps, and ordered to report to Maj. John D. Black, chief commissary of subsistence, depot commissary. In pursuance of such order I reported to Major Black, who was acting as chief quartermaster and captain of the port, as well as chief commissary, and by him was by verbal order appointed depot commissary. The harbor was full of vessels containing subsistence stores, which stores were collected into the depot here and issued under my supervision, and under the general instructions from Major Black to issue on memorandum receipts in view of the fact that the troops had no blanks and that the commissary depot had none to supply them with. Major Black's other duties were such that he was unable to give his personal attention to the commissary depot, and he therefore laid down the lines upon which he wished the business done and I saw that the same were carried out.

FREDERIC H. POMROY,

Captain and Commissary of Subsistence, U. S. Volunteers.

A true copy.

H. H. WHITNEY,

Captain and Acting Adjutant-General.

By Dr. CONNER:

Q. I understand you to say that you had no proper requisition blanks with you?

A. I have not, sir.

Q. You were the chief commissary of the expedition in command of General Miles?

A. I was, sir.

Q. How long had they been preparing for that expedition?

A. As to that, I know not.

Q. A considerable length of time?

A. Yes, sir.

Q. They went from Tampa?

A. No, sir; our headquarters went from Washington on the evening of the 8th; arrived at Charleston on the evening of the 9th, and sailed at once.

Q. You sailed from Charleston to Santiago?

A. Yes, sir.

Q. And from Santiago, after some days' delay, to Porto Rico?

A. Yes, sir.

Q. Now, how could it happen that the headquarters of the army and the men in the expedition should be without blanks; there was abundant time to prepare for them?

A. There was; there must have been. As to that, I have no knowledge. I sent my clerk to the Department to secure blanks shortly after I was appointed. Now, this is not from General Eagan himself, but some of his employees—but anyhow, my clerk was informed that it was hardly necessary, as we would not be called upon to use these blanks.

By Colonel DENBY:

Q. Going from the subject of blanks and back to the tinned meat: Can you tell me how many pounds were issued to your knowledge?

A. There were 84,480 pounds issued.

Q. You made a report on that subject, didn't you, Major?

A. Yes, sir; this is the report [producing paper].

Q. I have a report here which corresponds with what you state, although it is not figured up. You have 1-pound cans, 12,604 pounds; 2-pound cans, 86,292 pounds, and so on, and then you transfer 12,460, 44,124, and 2,220.

A. Yes, sir; those were transferred.

Q. This report submitted by General Miles I suppose is correct. Now you say that you issued to the amount of 88,000 of that?

A. 84,480.

Q. Was that the amount in the field, or in the hospitals and all?

A. The entire issue.

Q. Do you know anything about that tinned beef?

A. Yes, sir. I know of the class of animals, from my experience in raising beef for the market, that goes into the market and is quoted in the live-stock reports as "canners," because I have sold a good deal of such beef.

Q. Did you open a tin of it?

A. Oh, yes, sir.

Q. And did you ever eat any of it?

A. Once.

Q. How did it taste?

A. Very fair.

Q. Was it cooked?

A. No, sir; just raw.

Q. Was that can taken at random from the stock?

A. Yes, sir.

Q. Was it any better when it was cooked?

A. Yes, sir. I was hungry at the time, and it tasted very good to me. It was not pleasing to the sight.

Q. How was that?

A. Well, there are many things unpleasant to the sight that are also good to eat; and the appetite is helped by a pleasant-looking dish.

Q. Did you have any complaint from the troops to whom the 84,000 pounds were issued as to the quality?

A. Yes, sir; a number of cans were returned.

Q. What was the complaint?

A. That the contents were spoiled. In many cases a new can, or other cans, were issued in lieu of it.

Q. How do you account for its being spoiled?

A. Some defect in the canning.

Q. About how many were spoiled?

A. I do not know.

Q. Were there many?

A. I really could give you no idea. It was reported to me by Captain Pomroy.

Q. Did he report in writing?

A. No, sir; verbally.

Q. Do your records show the returned cans?

A. No, sir.

Q. When a regiment or company or hospital sent a can back and said it was bad, you sent another, and there it dropped; is that it?

A. Yes, sir.

Q. And you did not take account of it at all?

A. No, sir; these were retained for a time, and then a board of survey passed on them later.

Q. Was any board of survey held on them?

A. Not when I was there. I understood a board was asked for after I left, by Captain Pomroy, and it was to sit on these cans.

Q. Where is Captain Pomroy?

A. At Ponce, Porto Rico.

Q. Do you know whether they passed on the canned-beef question?

A. I do not. I suppose that would be taken in.

Q. Had you had any experience with canned beef before that time—anywhere in the service?

A. I had not.

Q. You had not?

A. No, sir.

Q. That was the first you had ever issued?

A. That was the first I had ever issued.

Q. Well, it is not uncommon, Major, for tins of tinned goods, such as tomatoes and other things, to turn out bad?

A. Oh, no.

Q. It is quite common that peaches turn out badly—canned peaches frequently turn out bad; isn't that your experience?

A. Any canned goods are liable to.

Q. You say, generally, this beef was good, but not palatable?

A. I judge only from the amount of canned beef issued to the troops.

Q. Don't you keep that canned beef as an emergency article?

A. Largely so.

Q. Are there any instructions to that effect?

A. No.

Q. In point of practice, you do not issue the canned beef when you can furnish fresh beef, either on the hoof or refrigerated, to the troops?

A. No, sir.

Q. When did you issue this tinned beef?

A. On requisition. Many of the troops going ashore when the expedition first arrived there, there was no fresh beef; there was a great deal of beef on the island—a great many cattle; and as soon as the troops got into the interior, they began using these cattle, supplying themselves. Before that this beef was issued; at any time on requisition it would be issued.

Q. Then you regarded it as an emergency issue, because you had no refrigerated beef or beef on the hoof?

A. Largely so.

Q. This issue of 84,000 pounds for the number of troops you had, if issued in lieu of other things, would be very small?

A. Yes, sir.

Q. You would issue twice that much in a week, wouldn't you?

A. Yes, sir.

Q. And therefore you kept it for an emergency?

A. It was issued whenever a requisition came in for it.

Q. Have you any criticisms to make on it further than you have stated—that it was not as palatable as other beef?

A. I would simply state that my knowledge of this canned beef was obtained, many years before going into the service, by the sale of stock. You will notice in the live-stock reports of the various cities—Chicago, St. Paul, and Minneapolis—

Q. Had you dealt in it?

A. I had not. You will find the quotations running from "prime" to "canners." By "canners" they mean (in making sale of stock there is a class of cattle goes in as "canners") bulls, runts of the herd, and that portion of the herd we fear will not go through the winter—they are turned in and sold under the name of "canners;" and my idea has been that this canned meat is largely composed of that class of cattle.

Q. Well, that does not necessarily mean bad beef, does it?

A. I don't know; I don't think I would want it on my table. I should prefer "prime" beef.

Q. If you were out hunting or camping out, you might take it as an emergency ration?

A. I think not, Colonel. I have hunted and camped out; I may be prejudiced, but my knowledge obtained in that way made me not take this on my expeditions.

By General DODGE:

Q. Are not the canners controlled more by the weight of the ox or cow or steer than by anything else?

A. It may be; this is the lowest priced beef.

Q. Cattle of low weight bring the lowest prices?

A. Yes, sir.

Q. That is, a steer weighing 400 pounds will bring far less per pound than a steer weighing 1,200?

A. Yes, sir.

Q. Therefore were those cattle termed "canners" not governed by weight?

A. As to that I can not speak; I know that in selling stock the purchaser will divide them up, and such and such are called "canners;" that is where my information comes from.

Q. You sell the domestic steers and the Texas steers there?

A. Yes, sir.

Q. And the Texas steer brings less than the Illinois steer?

A. That is true.

Q. But that is governed by weight, isn't it?

A. Largely so, possibly; I only speak of my experience in selling cattle on the market.

By Colonel DENBY:

Q. Do you know Major Baker, or whether he was in Porto Rico?

A. No, sir.

Q. Do you know Lieutenant-Colonel Minor, commanding officer of the Sixth Infantry?

A. I do not.

Q. Was he in Porto Rico?

A. I don't know.

Q. Isn't the inference that he was not there, then?

A. Hardly. Unless I went to the Adjutant-General's Office and learned the regimental commanders I would not know.

Q. Do you know Major Humphreys, of the Twelfth Infantry, or know of him or whether he was on the island?

A. I do not.

Q. Well, the same question as to Col. A. T. Smith, of the Thirteenth Infantry?

A. I do not.

Q. And the same as to Major O'Brien, of the Seventeenth Infantry?

A. I do not.

Q. And is not your answer the same as to all these others General Miles mentioned—Captain Duncan, Second Battalion of the Twenty-first Infantry?

A. I do not know where he was.

Q. And Major Van Horne?

A. No, sir.

Q. And Major Jackson; did you know him or whether he was on the island?

A. I did not.

Q. And the same as to Colonel Haskin, of the Second Artillery?

A. I did not.

Q. Same as to Lieutenant-Colonel McCrea, of the Fifth Artillery?

A. I do not know him.

Q. Same as to Light Battery K, First Artillery, Captain Best?

A. No, sir.

Q. First Cavalry, Brigadier-General Viele?

A. No, sir.

Q. Ninth Cavalry; do you know any of the officers of that?

A. I do not.

Q. Same as to Major Thompson, of the Twenty-fourth Infantry?

A. No, sir.

Q. Did you ever receive any complaint from any of these gentlemen I have named in regard to canned beef?

A. Not that I am aware of.

Q. Did you ever receive any complaint from any officer whatever in regard to canned beef?

A. Personally I did not. I was informed by Captain Pomroy—

Q. Pomroy was your assistant?

A. Yes, sir.

Q. But I mean the officers to whom this was issued.

A. The Eleventh and Nineteenth Infantry were with us at Porto Rico—

Q. Well; I speak of these officers here—you have answered that. Now, are there any other officers?

A. The Eleventh and Nineteenth Regular Infantry were with us at Porto Rico. I can not speak from personal knowledge of their making any reports; the reports were not made to me, they would be made to the depot commissary.

Q. You testify to what you know, Major. If you have seen any report on the files where the canned beef was condemned by any officer, please state it, and we will hunt it up.

A. I have not seen such a report.

Q. Then you tell this commission you have received no complaint, officially, from any officer in Porto Rico?

A. Only my depot commissary; but his reports are verbal.

Q. Then you mean you had a conversation with Captain Pomroy?

A. Yes, sir.

Q. Well, I have no objection to your stating what Captain Pomroy said, although that is not evidence.

A. It was to the effect that this beef was not acceptable in many instances. Some cans had been returned and their place taken by other goods supplied.

Q. Is that all the captain said?

A. All I remember at the present time.

Q. Did Captain Pomroy tell you any officer in command of any regiment, company, or battery made a formal official complaint as to this canned beef?

A. No, sir.

Q. Or that any head of a hospital complained of it?

A. Only verbally.

Q. Well, as you say, by sending back a can and getting another one?

A. And that the troops and men in the hospitals complained against this was the report that was made.

Q. I suppose you do not know how this was put up for the market?

A. No.

Q. With regard to boiled beef, you know personally that boiled beef is not as palatable as fresh roast beef?

A. That is true.

Q. Major, have you any statement that you would like to make with regard to anything relating to the supplies?

A. Nothing that I am aware of.

Q. With regard to all the other supplies about which we have minutely inquired, I believe you stated they were all good?

A. Yes, sir; and came in abundance, with this one exception. In making issues it was often the case that we did not have the component parts of rations. Large lots of certain component parts would be loaded in the hold of one vessel and the parts to make complete rations in another. On the 15th of August we ran short of sugar, beans, and rice, and those articles the men were particularly desirous to have, and I went to Mr. Blacine in the city and made arrangements to supply us with such amounts as we might need in issuing until vessels would come in from which we could supply ourselves, and from him we purchased, I think it was, about 11,000 pounds of sugar. I can not give you the exact amounts unless I look at my returns. Ten thousand pounds of rice, and 5,000 or 6,000 pounds of beans purchased from him in order to complete the rations issued.

Q. Then your men did not suffer?

A. They were not allowed to suffer. The instructions were—to Captain Pomroy—not to let any man suffer to whom the ration was due.

Q. You had money?

A. Yes, sir; but I had no check book. It did not reach me until ten days after coming back to Washington—on the 16th, I think it was.

Q. Well, if you did not have money, you had credit?

A. I had credit in New York, but it was not available, by reason of not having a check book.

Q. But you had no trouble in negotiating the paper?

A. No, sir.

Q. They were willing to credit the United States?

A. Yes, sir; without question. On the 15th Major Williams, chief commissary of subsistence, volunteers, arrived and he had a check book. The funds I had were turned over to him and he was appointed purchasing commissary.

Q. How much did he have after you turned yours over?

A. I turned over \$17,000.

Q. And how much did he have of his own?

A. I don't know, I am sure.

By Captain HOWELL:

Q. Did you take that money with you?

A. No, sir; it was placed to my credit in response to a telegram sent, I think, by General Miles.

Q. Was Colonel Sharpe on the island when you got there?

A. Colonel Sharpe came shortly after.

Q. He said he got there on the 28th of July.

A. He was with General Brooke.

Q. I understand.

A. Well, I don't know I am sure. August 2 the vessels that brought General Brooke—they embarked at Newport News on July 28 and arrived at Arroyo on the 2d.

Q. Major, I want to ask you now if General Miles, the commanding general, ever asked you in regard to the condition of this beef?

A. Yes, sir.

Q. When?

A. After our return to New York, or rather to Washington.

Q. He did not ask you about it there?

A. No, sir.

By Governor WOODBURY:

Q. What date was that?

A. We arrived the 7th of September, I think.

By Captain HOWELL:

Q. What did he ask you?

A. In regard to the condition of this beef.

Q. What did he say?

A. He wanted to know in what condition it came there and what report I had to make. I made him a report, which I have here.

Q. Read it.

A. This report is made December 14.

Q. Now, that is in answer to the first request he made?

A. No, sir; not the first request.

Q. Well, this is in answer to the request he made for a report on that beef. What date was that request made?

A. Shortly after arriving here this question was asked, and then he wanted a report in full. Under this date the report was made, December 14.

By Governor WOODBURY:

Q. What month was that he asked the question?

A. In September, shortly after our arrival from Ponce.

Q. Now, you had no request from him while you were there besides this?

A. No, sir.

Q. Read that.

A. (Witness reads as follows:) "On board the *Manitoba* were 1,755 quarters of refrigerated beef, in charge of Captain Aspinwall, commissary of subsistence, United States Volunteers. At this time the bulk of the troops were so far in the interior of the island that the meat would have become tainted in the hot and humid climate before it could have reached them, even had they required it for issue; but the fact of the case is the commissaries of the different commands did not care for it, reporting an abundance of fresh beef on the hoof, purchased from the natives and butchered as it was required. Some issues were made to the hospitals and troops camped near the playa, where they could be supplied in the cool of the early morning. In some instances the men refused to use it, as it was covered with a blue mold; others reported it as tender and juicy. One surgeon is reported as having it ordered 'buried' as being unfit for use."

By Dr. CONNER:

Q. Who was that surgeon?

A. I could not give the name. It was at one of the hospitals between Playa and the Ponce. These are the reports that came to me verbally, as I stated, from the depot commissary [witness continuing the reading as follows]: "The majority, however, preferred the newly killed beef, purchased from the market at Ponce at 12½ cents per pound, Porto Rican money. On August 24 the *Manitoba*, in conjunction with the *Alamo*, was ordered to Mayaguez with forage, clothing, and thirty days' rations for General Schwan's brigade, and from there to Arecibo to supply General Garretson's brigade with ten days' rations. From these troops I have no report, as the vessels did not return to Ponce until August 31, 1898."

By Captain HOWELL:

Q. That was the report you made to General Miles?

A. Yes, sir.

Q. Did you have any conversation with him subsequent to that?

A. No, sir.

Q. That is, about the beef?

A. No, sir.

Q. As long as you are on that question, at the time you had this conversation

with General Miles did he intimate to you that he had received reports that this beef had been chemically treated?

A. No, sir.

Q. When did you hear from him, if at all, his suspicion that this beef which was used on the island of Porto Rico had been chemically treated?

A. I never heard him say anything in regard to that, but I was present when Dr. Daly read his letter to the General. Now, I can not give the date of that, but I think it was near the time this report was called for in writing.

Q. In September?

A. Yes, sir; I think it was near that. I made no special note of it at the time.

By Colonel DENBY:

Q. Where were Daly, Miles, and yourself?

A. In the General's office.

Q. Here?

A. Yes, sir.

Q. And in December?

A. I think it was in December.

Q. Not at Porto Rico?

A. Oh, no; not at Porto Rico. It was in December, I think, at the time this published statement or writing, written statement, was called for by the General.

By Dr. CONNER:

Q. Had Dr. Daly made any previous report that you know of to the General?

A. It must have been so, for when I reported to the General, Dr. Daly said, "General, you have a letter from me referring to that matter," and from the office he went into the clerk's office and procured a copy and brought it back and read it to the General.

Q. That was in December?

A. I think that was the date—in December; that was the first I had heard or knew anything of this "embalmed beef," as they said—the reading of this letter by Dr. Daly and the General—and I think that was when this report was made.

By Governor WOODBURY:

Q. In asking for that report did the General request you to state your opinion as to whether this beef had been processed or not?

A. No, sir; he simply wanted a report of the conditions as I found them there, and this was the report I furnished.

By General McCook:

Q. Then what you state in your report is mere hearsay; you know nothing of your own knowledge?

A. That is all. It was reported to me verbally by the depot commissary. You gentlemen will probably understand that during the time we were in Porto Rico—we arrived on the 25th to July and on the 22d of August I was relieved; and in the meantime thirty-eight large transports had arrived with troops, camp and garrison equipage, quartermaster stores, and forage; and under my direction these had all been unloaded and stored ashore. So you can see that I had very little time. At the time these vessels were on the reef I never went to bed at all, because in each case a heavy wind was blowing, and there was fear of all these vessels going to pieces and losing men and stock; and the General's order was first to unload the men, then the stock, and afterwards the supplies. There were grave fears entertained when each of these vessels was on the reef that it might go to pieces, with the loss of the men and the vessel's contents.

Q. How did you find those cargoes stored there?

A. In bad condition.

Q. State what condition they were in. Did you make a report on it?

A. Yes, sir; I can give you a little synopsis: In the first vessel, the steamer *Yale*, there were 12 companies of the Sixth Massachusetts Volunteer Infantry. General Garrettsen had headquarters, General Miles had headquarters, and on this vessel when we began to unload we found General Duffield's brigade property, and it was transferred to the *Macon* and forwarded to him.

Q. General Duffield's property was on the *Yale*?

A. Yes, sir. The *City of Macon*, with troops on board, had 100,000 rations on board, but no officer in charge. Those were nearly complete rations. They were properly stored.

Q. They were properly stored, you say?

A. Yes, sir. The *Comanche* had 100,000 rations. Now, in many instances portions of these had been broken into by the troops and many boxes were partly emptied or wholly empty, showing they had been tampered with. With the exception of the potatoes and onions, which were had in nearly every instance, because they were stored in the holds of vessels and the temperature there, it was safe to say, was 110 and 115; the rest were properly stored and in good condition.

Q. Could the potatoes and onions have been stored on deck?

A. No, sir; because of the troops; and they were purchases of spring-grown material, which decays very rapidly. In some instances there would be wagons on one vessel; and in one instance I found the tongues on another vessel.

Q. That is, the running gear would be on one—

A. Yes, sir; and the boxes on another. In many instances there would be guns on one vessel and ammunition for them on another. Certain stores—some flour—would be on one vessel, and bacon, and no other supplies, as was the case on the *Mississippi*.

Q. Don't skip anything of interest there. [As witness turns over a few pages of statement in his hand from which he had been reading.]

A. The *Specialist*—that was one of the vessels that went with us on the expedition—had four caissons and limbers for Battery G, Fifth Artillery; they had also six 5.2 guns and caissons and limbers, with harness that belonged to a battery in Santiago, Cuba. There were 23 boxes of clothing consigned to General Shafter which the quartermaster at Daiquiri could not receive—brown canvas and cotton duck.

Q. They went to Porto Rico?

A. Yes, sir, and were ordered returned to Santiago as soon as we got our supplies off. The vessel was ordered to Santiago on the 28th. There was also a large amount of ammunition to go to Santiago. The *Grande Duchesse* arrived with General Haine on board. She had 250,000 rations for General Duffield's brigade and a large supply of medical stores on hand to be discharged at Santiago. She returned to Santiago July 31.

By Dr. CONNER:

Q. Had the *Grande Duchesse* gone into Siboney or Santiago before going to Porto Rico?

A. It must have been.

Q. She was a part of your expedition?

A. She was not with us on the expedition. She left—embarked at Charleston July 20; disembarked troops July 28 at Ponce.

Q. She had not gone to Santiago, I asked.

A. I could not say as to that. She embarked at Charleston on July 20 and disembarked at Ponce July 28. Then I have here the vessels that went with General Brooke. I know nothing about those. This [referring to memorandum] is a statement of the troops they had on board and the supplies they had on board, etc. We labored under a great deal of difficulty in landing these troops and supplies

by reason of the fact that there was no steam tugs or lighters with the expedition. We had the *Whitney*, a steamer of light draft, and we could get in with her within about 300 or 400 yards of the wharf, and the water was very shallow there, and there we would load the lighters, and the loaded lighters would be taken up by a class of men called "pole men"—they were very expert in the use of poles—and they would pole these lighters to the wharf, where they would be unloaded and then returned to where the *Whitney* could take them up.

Q. Do you know what water the *Whitney* drew?

A. Seven feet. We used the *Whitney* in bringing in the lighters loaded with troops and the stock from the vessels that had gone ashore. We used her very largely in that up to the time—I think it was the 15th—when the *Gypsum King*, towing three large lighters, and consigned to Messrs. Van Aiken & Co., contractors, arrived, and on one of these was a large steam tug or launch, which was turned over to the quartermaster after being coppered and sheathed. That is the first time we had a steam launch that we could call our own.

Q. You did not take any with you?

A. No, sir.

Q. That is the first that reached you?

A. Yes, sir; it reached us August 10, and was made available August 15. The Navy was very kind and would loan us their steam lighters—

Q. Loan you their what?

A. Loan us their steam launches—excuse me—that they had for towing boats. We used those during such times as they were not using them themselves. They were light, however, and were not able to tow more than one lighter at a time—these launches were of light weight and not able to tow more than one loaded lighter at one time. With this *Whitney* and this other vessel steam tug of which I spoke, we could tow six, eight, and ten of these loaded lighters. Now, did you wish to hear of the contents of these vessels as we found them?

Q. Not the contents so much as the way they were loaded; whether there was confusion or whether they were arranged systematically—whether you could go for sugar, for instance, and get it?

A. No, sir. The first vessel to arrive with invoices of stores furnished to the quartermaster was the *Alamo*, which arrived on the 15th. That was the thirty-seventh vessel that arrived there.

Q. Without any bills of lading at all?

A. The first vessel to furnish the acting quartermaster with a list of stores. Now, we had to go down into the holds and take out what we could find; and for that reason the component parts of the rations were not filled. It was my aim to keep the depot commissary supplied with all the rations. There was no depot regularly there, so we inclosed one of the large sheds that had been used for weighing in and shipping stores in the city. It was perhaps 150—yes, 200 feet square; as soon as we could get lumber from the Engineer's Department, we inclosed this shed and used it for a commissary depot, and that depot I aimed to keep supplied and filled with commissary stores for issue to the troops, because many of the times these troops were out 85 and sometimes 90 miles. That was one of the reasons it was necessary for me to make the purchases of which I spoke. But there was great confusion in the manner in which they were unloaded. This was the first vessel that arrived where we had an intelligent idea of how the vessel was loaded and what it contained.

Q. There was no manifest before this—this was the first?

A. Yes, sir; this was the first I received.

Q. They are called manifests?

A. Many of the captains reported, "I have no knowledge of what I have on board. I was loaded and pushed out." That was the report of very many of the

captains. This *Alamo* was sent in conjunction with the *Manitoba* around to Mayaguez.

Q. Do you know whether there was a manifest sent with the *Alamo*?

A. Yes, sir; and by that means and having a report from Captain Aspinwall on the *Manitoba* gave us an idea of what to supply to fill up the broken rations, to fill the supply and send it to General Schwan. The *Concho* arrived with forage, Red Cross supplies, hospital stores, etc. There was a general demand for these. General Brooke had his men lying on the ground—

Q. Who told you that?

A. Dr. Greenleaf.

Q. What was this statement about General Brooke—

A. (Continuing former answer.) That must have been about the time, for she was ordered to Arroyo on the 21st; she was ordered there to supply General Brooke with hospital tents, cots, and forage. I received a communication from General Greenleaf stating this fact, and requesting that expedition be used in supplying these tents, cots, etc.; and on going on board the vessel we found they were lying in the bottom of the hold; and on top, the last thing loaded, was a large supply of forage. As General Brooke was in the greatest need, the vessel was ordered, August 21, to supply General Brooke with tents, cots, and forage, and this forage had to be taken off before you could reach the hospital supplies in the hold of the vessel.

Q. Is that the vessel and the trip when the supplies were held a week after the arrival of the vessel before they were discharged?

A. I beg your pardon.

Q. We have a report that certain supplies were not delivered—medical supplies—for a week on account of their being in the hold of the vessel?

A. That was the vessel.

Q. Was that the *Massachusetts*?

A. No, sir; this was the *Concho*. She was ordered to Arroyo August 21 to supply General Brooke's men with hospital tents, cots, forage, etc., and returned to Ponce August 30. They were laboring under the same difficulty there we did in Ponce in unloading vessels. They had to be unloaded into lighters and then poled ashore. The *Rita*, with Col. John W. Pullman, quartermaster, arrived—embarked at Tampa, Fla., August 15, and arrived at Ponce August 22—with a full supply of quartermaster's stores and having aboard the first steam launch for the use of the expedition. The *Obdam* arrived the 25th with 57 carloads of commissary stores under the charge of Lieutenant-Colonel Smith, chief commissary of subsistence. She also had a steam launch aboard. These were the only two steam launches that arrived while I was there. This steam tug that I mentioned, the *Sarah*, came down in charge of Van Aiken & Co., contractors.

By Captain HOWELL:

Q. On the *Gypsum King* on August 16?

A. Yes, sir; on August 16. The *Panama* was embarked at New York City July 13, and disembarked at Ponce on the 28th of July. On board this vessel were 100 skilled mechanics and 250 laborers, with a lot of materials—pile drivers and other necessary material, under the charge of Messrs. Van Aiken & Co., contractors, of New York. They were the ones to whom this tug was consigned, but they at once turned the tug over to the quartermaster as soon as she was ready for use. On board the *Cherokee* was 448 boxes of .30-caliber ammunition for General Shafter. I think that is all.

Q. You had to reload this material for Santiago?

A. No, sir; we discharged that that was intended for our expedition, and then the vessels were ordered to Santiago.

By General McCook:

Q. Would you be kind enough to state why a commissary was ordered to perform the duties of a quartermaster in the discharge of these vessels?

A. My only understanding was that General Humphrey, who was the quartermaster on General Miles's staff, was retained at Santiago.

Q. You had no quartermaster with you?

A. No, sir; on the 23d, that was on the second day before we arrived—

By Dr. CONNER:

Q. Will you tell me this: You went first to Cuba?

A. Yes, sir.

Q. Now, going from Cuba to Porto Rico what were the transports in the command?

A. The steamer *Yale*, the *Columbia*, *Lampasas*, *Nueces*, *City of Macon*, *Comanche*, *Unionist*, *Stillwater*, and *Rita*.

Q. Were any medical supplies intended for Cuba on those transports after you left Cuba to go to Porto Rico?

A. The *Nueces* had 50 kegs of powder for General Shafter.

Q. Medical supplies?

A. Oh, medical supplies—I beg pardon. No, sir.

By General McCook:

Q. Will you be kind enough to tell me when you formulated that report?

A. Immediately after my return from the expedition.

Q. You formulated that here?

A. Yes, sir.

Q. Is it from memory?

A. From various data and memoranda I made at the time on slips of paper and memorandum books.

By General DODGE:

Q. With the expedition from Porto Rico—were you with it from the beginning?

A. Yes, sir; I left here with General Miles.

Q. Where were these steamers that formed part of your expedition loaded?

A. As far as I could obtain information, I have mentioned it—

Q. Hold on; I want simply to know where they were loaded.

A. The *Yale* at Charleston, *Columbia* at Charleston, *Lampasas* at Camp Tampa, Fla.; *Nueces* at Tampa, Fla. *City of Macon*, I have no knowledge of where she was loaded.

By General McCook:

Q. What was she loaded with?

A. Two hundred and seventy-five unassigned recruits and 100,000 rations. *Comanche*, I do not know. *Stillwater*, Tampa, Fla. Of the *Rita* and *Specialist* I have no data.

By General DODGE:

Q. Did the troops that went aboard these steamers bring with them these supplies?

A. Each body of troops had their supplies.

Q. And the troops loaded them, the supplies?

A. As to that I do not know. We used native stevedores in unloading.

Q. I am speaking of the loading.

A. I had no knowledge of that, because we went aboard the *Yale* the night of the 9th about 11 o'clock, and immediately after getting our headquarters' baggage she sailed; so that I had no means of knowing that.

By General McCook:

Q. She was a naval vessel?

A. Yes, sir.

By General WILSON:

Q. Major, before the war with Spain had you had any previous service in either the Regular or Volunteer Army? If so, when, where, and in what capacity?

A. In the civil war. I was in it from the 15th day of April, 1861, until the 1st of November, 1865.

Q. In what capacity; as an officer?

A. I enlisted April 15, 1861, as a private in the Erie Zouaves, a three-months' organization; was appointed a lieutenant, and mustered out with my regiment; reentered the service as first lieutenant, One hundred and forty-fifth Pennsylvania Volunteers, and December 13, 1862, was commissioned regimental adjutant; December, 1863, detailed as assistant adjutant-general at headquarters, Fourth Brigade, First Division, Second Army Corps; April 13, 1864, detailed as aid-de-camp on staff of Gen. Francis C. Barlow, commanding First Division, Second Army Corps, and remained with him until August 17, 1864, when, by reason of sickness, he was relieved by Gen. Nelson A. Miles, who continued my detail as aid-de-camp until the close of the war. On May 19, 1865, I was retained in service (my regiment being mustered out) and accompanied General Miles as aid-de-camp to Fortress Monroe, where he assumed charge of the State prisoners—Jefferson Davis, Clement C. Clay, and others. I participated in 32 engagements, was wounded in chest and left arm at Chancellorsville, through left lung and chest at Gettysburg, the drum of my left ear destroyed by concussion at Totopotomy, and again wounded in right side and chest (the bullet still being embedded in my side) at Weldon Railroad. I had five horses shot under me; and "for gallant services at the battle of Reams Station" was appointed a captain by brevet, and "for conspicuous bravery and valuable services at Southerland Station, and for meritorious conduct during the campaign terminating with the surrender of the insurgent army under Gen. Robert E. Lee" a major by brevet. October, 1865, I tendered my resignation and was mustered out under date of October 30, 1865.

By Colonel DENBY:

Q. What was your regiment?

A. First the Erie Zouaves, and the second regiment was the One hundred and forty-fifth Pennsylvania.

By General WILSON:

Q. The steam launches you referred to, from whom did they come?

A. Colonel Pullman brought a steam launch with him on the *Rita*, which was loaded entirely with quartermaster's supplies, and he claimed he was going to hold the vessel there as a store ship, because the depots we secured were filled.

Q. Then the quartermaster controlled them, except the steam tug that came for the contractors?

A. Yes, sir.

Q. Now, one remark you made was that you got lumber from the Engineer Department to build storehouses. How did that happen?

A. On board the *Lampasas*, on which Colonel Black, with the engineer battalion, came down, was a large supply of lumber, together with pontoons.

Q. That was purchased under direction of Major-General Miles, I presume?

A. Yes, sir; and as there were no depots convenient, it was by his order that these sheds—

General WILSON. I merely wanted to know about the lumber.

3444 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

WASHINGTON, D. C., *January 18, 1899.*

Maj. STEPHEN C. MILLS, *Inspector-General, Recorder.*

SIR: I have the honor to submit herewith a supplementary report to my testimony before your honorable commission.

I would very respectfully call attention to Special Orders, No. 148, Adjutant-General's Office, June 24, 1898, herewith:

"SPECIAL ORDERS, } "No. 148. }	HEADQUARTERS OF THE ARMY, ADJUTANT-GENERAL'S OFFICE, <i>Washington, June 24, 1898.</i>
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"10. By the direction of the Secretary of War Maj. John D. Black, chief commissary of subsistence, United States Volunteers, recently appointed, will report in person to the Major-General Commanding the Army for assignment to duty.

* * * * *

"By command of Major-General Miles:

"H. C. CORBIN, *Adjutant-General.*"

in which I am ordered to "report in person to the Major-General Commanding the Army for *assignment to duty.*" On reporting to the general it was asked, among other things, if I had a good horse, for, quoting his own words, "If we get into any trouble down there you may have a chance to smell powder again," leading me to believe my duties were to be *in the field*, knowing, as I did, that paragraph 22 of Special Orders, No. 90, Adjutant-General's Office, April 18, 1898, herewith:

"SPECIAL ORDERS, } "No. 90. }	HEADQUARTERS OF THE ARMY, ADJUTANT-GENERAL'S OFFICE, <i>Washington, April 18, 1898.</i>
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[Extract.]

"22. At the request of the Major-General Commanding the Army the following-named officers are temporarily relieved from their present duties by the Secretary of War, and by his direction will report in person to the Major-General Commanding the Army for duty:

- "Lieut. Col. William Ludlow, Corps of Engineers.
- "Lieut. Col. Charles F. Humphrey, deputy quartermaster-general.
- "Maj. Henry B. Osgood, commissary of subsistence.
- "The travel enjoined is necessary for the public service.

* * * * *

"By command of Major-General Miles:

"H. C. CORBIN, *Adjutant-General.*"

had not been revoked, only so far as paragraph 46 of Special Orders, No. 148, Adjutant-General's Office, June 24, 1898, applied to Major Osgood, commissary of subsistence:

"SPECIAL ORDERS, } "No. 148. }	HEADQUARTERS OF THE ARMY, ADJUTANT-GENERAL'S OFFICE, <i>Washington, June 24, 1898.</i>
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"46. By direction of the Secretary of War Maj. Henry B. Osgood, commissary of subsistence, when relieved from duty by the Major-General Commanding the Army, will repair to this city and report in person for duty to the Commissary-General of Subsistence.

"The travel enjoined is necessary for the public service.

"By command of Major-General Miles:

"H. C. CORBIN, *Adjutant-General.*"

and the further evidence, by letter of General Gilmore, adjutant-general, to Colonel Humphrey, under date of July 16, herewith:

“HEADQUARTERS OF THE ARMY,
“On Board U. S. S. Yale, July 16, 1898.

“Col. C. F. HUMPHREY:

“The commanding general directs that you report to him to-morrow morning at 7 o'clock on board the transport nearest the wharf. Bring with you list of transports and property on same. You can also bring with you your clerk if needed, and furnish transportation for Colonel Weston. Acknowledge receipt and name transport.

“Very respectfully,

J. C. GILMORE, *Brigadier-General.*”

and telegram to General Shafter July 17, 1898, herewith:

[Telegram.]

“HEADQUARTERS OF THE ARMY,
“On Board U. S. S. Yale, off Siboney, Cuba, July 17, 1898.

“Maj. Gen. W. R. SHAFTER, *Camp near Santiago, Cuba:*

“Commanding general directs that Col. J. F. Weston, chief commissary of subsistence, United States Army, be relieved as soon as practicable from his present duty by suitable officer designated by you. Commanding general desires me to state that he recognizes the hard and most efficient service rendered by Colonel Weston, and as he is needed to assist in preparing the expedition to Porto Rico, he desires that as soon as relieved you direct him to report at headquarters of the Army.

“J. C. GILMORE, *Brigadier-General.*”

and cablegram to Secretary of War July 18, 1898, herewith:

[Cablegram.]

“HEADQUARTERS OF THE ARMY,
“Playa del Este, July 18, 1898—12 m.

“SECRETARY OF WAR, *Washington, D. C.:*

* * * * *

“Tugs, lighters, construction corps, engineer corps under Colonel Black at Tampa; General Stone's boats now at Jacksonville; artillery, cavalry, siege train, and infantry, ample hospital supplies and appliances, and ambulances; full transportation for all the organizations should be directed to go to Porto Rico; also, officers to establish depots of quartermaster, commissary, and ordnance supplies, and quartermaster funds to the extent of \$100,000, for hire of native transportation and purchase of horses, should be sent.

“Paymasters with ample funds should be sent at once to Santiago and Porto Rico.

“A strong, fast, seagoing dispatch boat should also be sent to Porto Rico.

“MILES, *Major-General, Commanding.*”

and telegram to General Shafter July 20, 1898, herewith:

[Telegram.]

“HEADQUARTERS OF THE ARMY,
“On Board U. S. S. Yale, July 20, 1898.

“General SHAFTER, *Santiago:*

“In regard to Colonels Humphrey and Weston being relieved, it was left to your discretion as to the time; as to their knowing what is in the vessels, it is

hoped that every vessel will be emptied in a very few days. In regard to issuing supplies to the Spanish prisoners, they have their own commissaries and quartermasters, and I would think it advisable to issue to them in bulk every five or ten days and let them distribute it themselves. *It is very important that I should have the services of these two officers, as there are neither quartermasters nor commissaries with the expedition.* Their services will be needed immediately to establish a depot wherever we land. In sending your troops up into the mountains, if you require the pack train, you may keep it with your command.

“MILES, Major-General, Commanding.”

and telegram to Colonel Humphrey July 20, 1898, herewith:

[Telegram.]

“HEADQUARTERS OF THE ARMY,

“Playa del Este, July 20, 1898.

“Colonel HUMPHREY, Siboney:

“Washburn and your two clerks here and will go to Porto Rico on the *Nueces*. You and Weston and men must go in quarantine five days before going to Porto Rico. *City of Macon* here, loaded with 100,000 rations. What else is she capable of carrying to Porto Rico? *It looks as if we will be short of transportation there.*

“MILES.”

and cablegram relative to transportation of July 21, 1898, herewith:

[[Cablegram.]]

“ON BOARD U. S. S. YALE,

“Guantanamo Bay, July 21, 1898.

“SECRETARY OF WAR, Washington, D. C.:

* * * * *
“Would like the organizations sent as nearly complete as possible; that is, *the transportation belonging to the commands*, sufficient amount of forage for animals, and complete rations. The latter is very important to keep complete rations together, rather than shipped in bulk.

* * * * *

“MILES, Major-General, Commanding.”

July 21, 1898, the expedition sailed for Porto Rico without Colonels Humphrey and Weston, and on July 23, 1898, Special Field Orders, No. 3, herewith:

“SPECIAL FIELD ORDERS, {

“No. 3. }

HEADQUARTERS OF THE ARMY,

On Board U. S. S. Yale,

En route for Porto Rico, July 23, 1898.

“PAR. 1. Maj. J. D. Black, chief commissary of subsistence, United States Volunteers, is hereby appointed an acting assistant quartermaster. He will take charge of the unloading of all the property and supplies on board the transports and will see to their proper distribution and storage, and will transfer from the U. S. S. *Yale* the property of Brigadier-General Duffield's brigade to the *City of Macon*.

* * * * *

“After the transports are unloaded and ready for sea, he will give the necessary orders directing them to proceed to their destinations.

“By command of Major-General Miles:

“J. C. GILMORE, Brigadier-General.”

was handed me, which explains itself.

In view of my appointment by the President as chief commissary of subsistence, with the rank of major, and after consulting with my clerk, Mr. John B.

Mack (an old commissary sergeant), who came to me very highly recommended by Mr. De Caindry, chief clerk to the Commissary-General, I deemed it advisable to take with me a full supply of all blanks necessary, and with this in view sent Mr. Mack to obtain this supply, as is in evidence by his certificate herewith:

“WASHINGTON, D. C., *January 17, 1899.*

“I certify on honor that I was employed under date of July 1, 1898, in the Subsistence Department, United States Army, as clerk, and have continued in such employment to the present date, under the direction of Maj. John D. Black, chief commissary of subsistence, United States Volunteers.

“Under date of July 2, 1898, Major Black made a requisition for a typewriter and a supply of office stationery for his official use, this requisition being referred by the Commissary-General of Subsistence, United States Army, to the purchasing commissary in New York City July 3, 1898, to fill.

“These articles (including a field desk that Major Black had requisitioned for previous to my entry into service) were not delivered to Major Black until September 12, 1898, this being after his return from the Porto Rican expedition.

“On July 3, 1898, Major Black, after telling me that he could not tell where the requirements of the service might cause us to be sent or what duty we might be called upon to perform, but that in any event it would be wise to try and provide for any emergency that might arise, directed me to call on the Commissary-General's chief clerk and ask him to furnish Major Black with a supply of the various blank forms used in the Department, and, if at all possible, a suitable case or box to contain the same for transportation in the field.

“This I did, and was informed by Mr. De Caindry (chief clerk) that Major Black, as chief commissary, would not have any use for blank forms, and that it would hardly be wise for him to burden himself with things he would have no use for, or words to that effect.

“I immediately returned to the office and reported results to Major Black.

“JOHN B. MACK.”

While lying off Siboney it was suggested by General Gilmore that, as I was a commissary of subsistence, and until such time as Colonel Weston could report, it would be well to try and secure from \$1,000 to \$5,000 to be used in emergency. That the effort was made is in evidence by a letter to Colonel Weston, dated July 16, 1898, herewith:

“U. S. S. YALE, *July 16, 1898.*

“Colonel WESTON, *Chief Commissary, Siboney, Cuba.*

“SIR: I have the honor very respectfully to request that you transfer \$1,000, subsistence funds, to my order, and a sufficient number of checks, or a check book, for use at these headquarters, with your invoice.

“I am, sir, very respectfully, your obedient servant,

“JOHN D. BLACK,

“*Major and Chief Commissary Subsistence, United States Volunteers.*”

And a cablegram to the Commissary-General of Subsistence, dated July 16, 1898:

“HEADQUARTERS OF THE ARMY, OFF SIBONEY, *July 16, 1898.*

“COMMISSARY-GENERAL OF SUBSISTENCE, *Washington, D. C.:*

“Place \$5,000, subsistence funds, to my order, and send me check book with invoice.

“JOHN D. BLACK,

“*Major and Chief Commissary Subsistence,
United States Volunteers, Army Headquarters.*”

The reply being a communication from the Commissary-General of Subsistence, dated July 17, herewith:

“WAR DEPARTMENT, OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,

“Washington, D. C., July 17, 1898.

“Maj. JOHN D. BLACK,

“Chief Commissary Subsistence, United States Volunteers,

“Staff of Maj. Gen. N. A. Miles, Siboney, Cuba, via Tampa, Fla.

“SIR: The Secretary of War has this day been requested to cause the following sum of money, from the appropriation ‘Subsistence of the Army, January 1, 1899,’ to be placed with your credit, viz:

“With the assistant treasurer United States, New York, N. Y., \$5,000. Assistant treasurer, New York, has been asked to send you a check book. Consult Army Regulations, 591, and furnish assistant treasurer with your verified signature.

“By direction of the Commissary-General of Subsistence.

“Very respectfully,

“GEORGE B. DAVIS,

“Colonel, United States Army,

“Assistant to the Commissary-General of Subsistence.”

and the following notice of transmission of blank checks and receipts therefor:

“NOTICE OF TRANSMISSION OF BLANK CHECKS AND RECEIPT THEREFOR.

“UNITED STATES SUBTREASURY SERVICE,

“OFFICE OF THE ASSISTANT TREASURER,

“New York City, July 19, 1898.

“JOHN D. BLACK,

“Major and Chief Commissary of Subsistence,

“United States Volunteers, Siboney, Cuba.

“SIR: In compliance with request of the Commissary-General of Subsistence, United States Army, I have this day forwarded to you by mail blank commissary checks Nos. 126501 to 126700, both inclusive.

“Please fill in and sign receipt below and detach and return it to this office at once.

“Respectfully, yours,

“M. C. MUHLEMAN,

“Acting Assistant Treasurer, United States.”

After landing at Guanica the following cablegram, under date of July 26, 1898, was sent:

[Cablegram.]

“ON BOARD S. S. CITY OF MACON,

“Guanica Bay, July 26, 1898.

“SECRETARY OF WAR, Washington, D. C.:

“There is but one disbursing officer with this command, Maj. J. D. Black, commissary. Funds are immediately required. There is abundance of cattle and much native transportation which can be procured, and I request that ample funds be furnished for both commissary and quartermaster's departments by first steamer.

* * * * *

“MILES, Major-General.”

followed August 2, 1898, by cablegram herewith:

[Cablegram.]

“HEADQUARTERS OF THE ARMY,

“Port Ponce, Porto Rico, August 2, 1898.

“SECRETARY OF WAR, Washington, D. C.:

“Please inform me how soon ample quartermaster and commissary funds will be available at this place. We are using native transportation and employing labor in

unloading transports and storing supplies. Abundance of beef cattle, coffee, sugar, and supplies of that character can be obtained in the country. Request that no more fresh beef be sent, as it can not be used more than a day from the coast.

* * * * *

"MILES, Major-General, Commanding."

and August 5, by cablegrams herewith, to General Eagan:

[Cablegram.]

"HEADQUARTERS OF THE ARMY,
"Port Ponce, P. R., August 5, 1898. (Sent 5 p. m.)

"EAGAN, Commissary-General, Washington, D. C.:

"Sharpe 35 miles from here; no communication with him. General Miles August 2 cabled Secretary of War: Request no more fresh beef be sent; can not be used more than one day from coast.

"GILMORE."

[Cablegram.]

"HEADQUARTERS OF THE ARMY,
"Ponce, P. R., August 5, 1898. (Sent 5.10 p. m.)

"EAGAN, Commissary-General, Washington:

"With reference to funds, Maj. J. D. Black, chief commissary, at headquarters does not have a cent. Can you not cable him credit of \$50,000?

"MILES, Major-General."

the reply to which was the following communication from the Commissary-General of Subsistence:

"WAR DEPARTMENT,
"OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
"Washington, D. C., August 6, 1898.

"Maj. JOHN D. BLACK,

"Chief Commissary of Subsistence, Volunteers,

"Staff of Maj. Gen. N. A. Miles, Ponce, P. R.

"SIR: The Secretary of War has this day been requested to cause the following sum of money, from the appropriation 'Subsistence of the Army, January 1, 1899,' to be placed to your credit, viz:

"With the assistant treasurer United States, New York, N. Y., \$10,000.

"By direction of the Commissary-General of Subsistence.

"Very respectfully,

"GEORGE B. DAVIS,
"Colonel, U. S. Army, Assistant Commissary-General of Subsistence."

August 11, 1898, Capt. W. P. Williams, assistant quartermaster and disbursing officer, with Messrs. Van Aikin & Co., contractors, having arrived, was instructed to turn over certain funds. See letter herewith:

"HEADQUARTERS OF THE ARMY,
"Port Ponce, P. R., August 11, 1898.

"Capt. W. P. WILLIAMS,

"Assistant Quartermaster, Port Ponce, P. R.

"SIR: The Major-General Commanding the Army directs that you transfer to the officers named below funds as follows:

* * * * *

"To Maj. John D. Black, chief commissary, acting quartermaster, for incidental expenses, \$2,000; for transportation of the army, \$1,000.

"Very respectfully,

J. C. GILMORE,
"Brigadier-General, U. S. V."

August 15 Maj. William Williams, chief commissary of subsistence, and the first subsistence officer with a check book to arrive in Ponce, was, by paragraph 4 of Special Field Orders, No. 26, Port Ponce, P. R., August 17, 1898, "assigned to duty at the depot commissary of this port," and to him was turned over the commissary funds in my possession, my authority being as follows, under date of August 19 1898, and August 22, 1898:

"HEADQUARTERS OF THE ARMY,

"Port Ponce, P. R., August 19, 1898.

"Maj. JOHN D. BLACK,

"Chief Commissary, Acting Quartermaster.

"SIR: The major-general commanding directs that you transfer to First Lieut. A. B. Foster, depot quartermaster, the public funds now in your possession, namely, \$2,000 incidental funds and \$1,000 transportation of the army. You will also transfer the commissary funds in your possession, amounting to \$7,127.16, to Maj. William Williams, commissary of subsistence.

"Very respectfully,

J. C. GILMORE,

"Brigadier-General, United States Volunteers."

"HEADQUARTERS OF THE ARMY,

"Port Ponce, P. R., August 22, 1898.

"Maj. JOHN D. BLACK,

"Chief Commissary of Subsistence, United States Volunteers, Port Ponce.

"SIR: The major-general commanding directs that you transfer to Maj. William Williams, chief commissary of subsistence, United States Volunteers, \$10,000 of the subsistence funds in your possession.

"Very respectfully,

J. C. GILMORE,

"Brigadier-General, United States Volunteers."

At this time Col. John W. Pullman, quartermaster, United States Volunteers, arriving with a large supply of clothing, forage, and quartermaster stores on the *Rita*, I was relieved by Special Field Orders, No. 31, August 22, herewith:

"SPECIAL FIELD ORDERS, }
"No. 31. }

HEADQUARTERS OF THE ARMY,

Port Ponce, P. R., August 22, 1898.

"PAR. 1. Maj. John D. Black, chief commissary of subsistence, United States Volunteers, is hereby relieved from duty as acting assistant quartermaster and commissary of subsistence in connection with the Porto Rican expedition.

"By command of Major-General Miles:

"J. C. GILMORE,

"Brigadier-General, United States Volunteers."

After being relieved, by verbal request of Colonel Pullman I completed the loading of the transports *Manitoba* and *Alamo* with forage, quartermaster, and commissary stores for General Schwan's brigade, at Mayaguez, and General Garretson's brigade, near Arecibo, to which points they sailed August 24 and 26, respectively.

Lieut. Col. A. L. Smith, chief commissary of subsistence, with 57 carloads of commissary stores, 63 wagons, and a supply of ammunition on board the *Obdam*, arrived on the 25th day of August, and by verbal order of the major-general commanding, August 28 I relieved him in the unloading and transferring of the commissary stores from the *Obdam* to the *Stillwater*, as per Special Field Orders, No. 36, August 27, 1898, herewith, and other papers explanatory thereof:

"SPECIAL FIELD ORDERS, }
"No. 36. }

HEADQUARTERS OF THE ARMY,

Port Ponce, P. R., August 27, 1898.

"PAR. 1. Lieut. Col. A. L. Smith, commissary of subsistence, United States Volunteers, will transfer all the commissary stores now on the transport *Obdam*

to the transport *Stillwater*, if possible. In case the *Stillwater* should not have capacity for all the stores, the remainder will be transferred to the transport *Rita*.

"Lieutenant-Colonel Smith will take station, with his clerks, on the transport *Stillwater* as soon as practicable.

"By command of Major-General Miles:

"J. C. GILMORE,

"*Brigadier-General, United States Volunteers.*"

"PONCE, PORTO RICO, August 27th, 1898.

"The ADJUTANT-GENERAL.

"*Headquarters of the Army, Ponce, P. R.*

"SIR: I have the honor to acknowledge receipt of Special Field Orders, No. 36, of this date, and to report that I have already begun the transfer of the stores in compliance therewith, and taken station myself on the transport. Under S. O., 183, A. G. O., Washington, August 6, 1898, certified extract herewith inclosed, and telegraphic instructions from the Commissary-General of Subsistence, dated Washington, D. C., August 16, 1898, copy herewith inclosed, offices have been rented and clerks have been stationed in the town of Ponce; hence the removal of the clerks and the property with them will require a little more time. This, however, will not interfere with the transferring of the stores from the *Obdam*, which will be executed with as little delay as practicable.

"As S. F. O., No. 36, will materially interfere, in my opinion, with the execution of the telegraphic instructions of the Commissary-General of Subsistence, I would respectfully request that I be allowed to return to my station at Ponce as soon as the exigencies of the service will admit.

"Very respectfully,

A. L. SMITH,

"*Lieut. Colonel, C. S., U. S. Army.*"

[Extract.]

"SPECIAL ORDERS, } WAR DEPARTMENT, ADJUTANT-GENERAL'S OFFICE,
"No. 183. } Washington, August 5th, 1898.

[Extract.]

* * * * *

"Major Albert D. Niskern, commissary of subsistence, U. S. Army, will be relieved from the duties of purchasing and shipping subsistence supplies at the subsistence depot at Miami, Florida, by Major James N. Moody, commissary of subsistence, U. S. Volunteers, and will then proceed with his authorized clerk and the commissary-sergeants on duty with him to Tampa, Florida, and relieve Lieutenant-Colonel Abiel L. Smith, commissary of subsistence, U. S. Vols., of the duty of purchasing and shipping subsistence supplies at the depot at that place. Lieutenant-Colonel Smith, upon being relieved, will proceed, with his two authorized clerks and the commissary-sergeants on duty with him, to Porto Rico and assume the duties of purchasing and shipping subsistence supplies at a depot to be established in that island.

* * * * *

"The travel enjoined is necessary for the public service.

"By order of the Secretary of War:

"H. C. CORBIN, *Adjutant-General.*"

"THE WESTERN UNION TELEGRAPH COMPANY,

"Washington, D. C., August 16th, 1898.

"SMITH, Commy., care Niskern, Commy. (to be delivered or forwarded to Charleston), Tampa, Fla.:

"On arrival in Porto Rico look over the ground and determine and advise me, after consultation with General Miles or Brooke, where the depot should be established. I presume San Juan will be the best point. I have no special instructions that you will need further than to state you are sent there by direction of the Secretary of War, and you will gather in as well as you can all subsistence supplies, properly warehouse them and issue to all commanders on requisitions. You need no further instructions from me that I know of. Concede all that is possible to the end that the troops shall be fully, completely, and promptly supplied. Report to me at the earliest practicable moment as fully and completely as possible when supplies can be purchased there to advantage, and if fresh beef slaughtered there in that climate is fit for issue, and whether refrigerated beef will be required. Report your departure from Charleston, and, as promptly as you can, your arrival at Porto Rico.

"EAGAN, *Commissary-General*."

"HEADQUARTERS OF THE ARMY,

"Port Ponce, P. R., August 28, 1898.

"Lieut. Col. A. L. SMITH, *Commissary of Subsistence*.

"SIR: In reply to yours of the 27th instant, you are informed that your request to be allowed to return to your station at Ponce, as soon as the exigencies of the service will admit, is approved by the Major-General Commanding.

"Very respectfully,

"J. C. GILMORE,

"*Brigadier-General, U. S. Volunteers*."

Respectfully submitted.

JOHN D. BLACK,

Major and Chief Commissary of Subsistence, U. S. Volunteers.

WASHINGTON, D. C., January 9, 1899.

TESTIMONY OF FREDERICK W. WILDER.

Mr. FREDERICK W. WILDER appeared before the commission, was sworn, and testified as follows:

By Colonel DENBY:

Q. State your name, Mr. Wilder.

A. Frederick W. Wilder.

Q. Your residence.

A. Chicago, Ill.

Q. Your occupation.

A. General superintendent of Swift & Co.

Q. What business are they engaged in?

A. General packers and slaughterers.

Q. Of what?

A. Cattle, sheep, and hogs.

Q. What part of the business are you connected with?

A. General superintendent of all the plants.

Q. Tell us what the duties of general superintendent are.

A. The general supervision of the practical work of the different plants in the slaughtering, curing, handling, and chilling of the meats, etc.

Q. Now tell us in your own way, but as much as possible in detail, what is done is with cattle in Chicago at Swift & Co.'s when you propose to prepare them for the market; how they are procured on the hoof and what is done with them afterwards, as long as they remain under your supervision, and how they are graded, etc.

A. All cattle slaughtered by Swift & Co., in Chicago, are purchased in the stock yards at Chicago. The cattle are shipped in by the original owner to commission men.

Q. You mean Swift & Co. do not buy cattle anywhere except from the stock yards?

A. For the Chicago plant. The same would be true of other points also. All cattle are purchased of a commission firm. We do not trade with the original owner. The cattle, when purchased, are weighed by the stock yard company who operate the scales. At each one of these scales is located a Government inspector.

Q. You mean a United States Government inspector?

A. Yes, sir. At this point they are given an ante-mortem inspection—

Q. What is the name of the inspector?

A. Dr. Devoe.

By Governor WOODBURY:

Q. You were going to say something about the ante-mortem inspection.

A. The cattle are inspected by the Government inspector as they come to the scales. He inquires who these cattle are from and who for. If they are from some State commission firm for abattoir No. 3, which is Swift & Co's serial number of the abattoir, a record is kept of the cattle as they go over and are examined as they go by. Any animals not considered fit for food are thrown out.

Q. Tell us how that examination is made.

A. They examine them there largely for "lumpy jaw."

Q. What is that?

A. It is a large lump which comes on the jaw. It is a contagious disease. The technical term is actinomycosis. Cattle infected with that disease are considered unfit for food, and any showing symptoms of it are thrown out. If condemned after inspection, it is the loss of the commission men selling them and not Swift & Co.

Q. Then you mean that every particular sore is examined?

A. Yes, sir.

Q. Well, what takes place then?

A. The cattle are then driven to the abattoirs. Cattle purchased to-day would be driven this afternoon to the abattoir.

By Captain HOWELL:

Q. You don't mean to say that that inspector only looks for that disease? He looks for everything?

A. He looks for everything; but that is the only disease that can be detected while the animal is on the hoof.

Q. Does he examine him for anything else?

A. No, sir.

Q. If there is any other trouble that he can see before killed—

A. I would say this: Unless it is an extreme case of emaciation. These are the two principal points.

Q. Suppose they had a running sore on them?

A. It would be hardly possible. Outside the lumpy jaw there are no sores.

Q. Suppose there was; would he take that into consideration?

A. That would not be considered. The case is not possible unless it is the result of some injury.

By Colonel DENBY:

Q. All cattle go to the abattoir?

A. Yes, sir.

Q. That belongs to Swift & Co.?

A. Yes, sir.

Q. Cattle purchased to-day would be driven to the abattoir this afternoon?

A. We never kill cattle on the day purchased, as we want them to stand in the yard over night before killing them and to be in the best of condition before slaughtered; so the cattle purchased to-day would be slaughtered the day following. They are driven into the slaughter pens, where they are knocked down.

Q. Describe these pens.

A. It is a long, narrow alley, having doors 10 feet apart. The cattle are driven into the stalls and the doors shut behind them, and the butcher knocks them over the head with a large hammer and knocks them down and stuns them. One side of the pen hoists, and at the same time the floor on which they are lying tips up and the animal rolls out on the floor. They immediately chain them there by the hind legs, and they are hoisted up by the heels, and while in that condition the main arteries are severed in the neck, with the head hanging down. By this means we get cattle bled very much better than formerly, where they bled on the floor. In that case all the blood that was able to be gotten out of the cattle was by force of the veins. This is by the force of gravity in addition.

Q. Do you cut the heads off?

A. When the cattle are dead. That severs all the arteries. They hang in that position twenty to forty minutes and they are thrown down onto the beds to be dressed.

Q. Then what is done?

A. In dressing cattle as dressed in these large abattoirs they dress them by what is called a "string gang," a division of labor. The animal is thrown down on the first bed, another on the next, and so on. Everybody starts on this one animal, and he has a certain part to perform, and it goes to the next one, and clear through the house to 26 beds. Then the same work is done over on other cattle. We kill about 120 cattle an hour with one gang. Of course there is no one animal dressed in thirty seconds, but the fact that we are working on 40 or 50 cattle at a time enables us to do that.

Q. How many men?

A. One hundred and twenty now call for about 150 men.

Q. All working at the same time?

A. Yes, sir.

Q. That results in what then, in the cattle being entirely—

A. That results in the skin being taken off, the entrails removed, and the beef thoroughly washed, ready for the chilling room.

Q. How do you wash the beef?

A. With hot water and brushes. Every brush is connected with a light hose, through which a stream of hot water runs, and a man with a long-handled brush washes the beef.

Q. Is the beef cut in quarters at that period or halves?

A. Halves.

Q. And this washing takes place when cut in halves?

A. Yes, sir.

Q. Then what is done?

A. The entrails are removed. The animal at first is cleaned on the floor, the hide taken off the sides, and then he is raised with a sling hoist part way and rumped, which consists of cutting the head off and tails. At this point the entrails

are removed, and a post-mortem examination by the Government official takes place.

Q. Who is that Government official?

A. He is an appointee of the Government, coming in directly under Dr. Devoe as inspector in chief.

Q. How many are there?

A. At our abattoir there is a doctor appointed by Dr. Devoe, who has charge of the beef on our killing floors. We kill cattle in two houses. He, in turn, has an inspector in each one of the houses in addition to myself.

Q. And who are they; doctors?

A. Doctors as well.

Q. When you say doctor, you mean veterinarian?

A. Yes, sir.

Q. Are these men graduates of a college?

A. I understand they are.

Q. Veterinary college?

A. Yes, sir.

Q. So you have three doctors there for the post-mortem?

A. Yes, sir.

Q. Tell us how they make the post-mortem?

A. The inspector in each house follows along each run, and as each animal is cleared out, as we call it, and he examines the vitals and intestines, just gives them a glance and looks over the carcass and goes to the next one; and every animal killed is subject to that inspection.

By Dr. CONNER:

Q. As I understand, 125 animals an hour pass along the run?

A. Yes, sir.

Q. Do you suppose it is possible for any man in half a minute to determine very certainly what the condition of an animal is that has just been slaughtered?

A. Quite possible. He could not, of course, make a microscopic examination, but he could look over the cattle very rapidly.

By Captain HOWELL:

Q. If he sees anything improper he makes a very minute examination?

A. Yes, sir.

By Dr. CONNER:

Q. Do I understand you to say that these men are so expert that in one-half a minute they can examine the intestines, intestine cover, liver, kidneys, and lungs of the animal?

A. He can examine the lungs, liver, and intestines. It needs but a passing glance. A person who is used to seeing them can tell whether they are healthy. If they are not healthy he can give them more attention.

Q. How can he see them if the animals go along at half a minute apart?

A. The animals are stationary and he goes along.

Q. I thought you said that the examination of the intestines, etc., was done while the process was going on that you spoke of—as they were passing along.

A. As the men passed along from one animal to another.

By Colonel DENBY:

Q. Tell us how many animals—say in a week—the doctor or the inspector has found to be unfit for use?

A. There have been weeks when we have had 20 cattle condemned.

Q. Condemned by this inspector?

A. Yes, sir.

By Dr. CONNER:

Q. That is, passing 120 an hour?

A. I would modify that to say that probably these 20 cattle were condemned out of a killing of 9,000. While we kill at the capacity of 120 an hour, we do not work ten hours a day.

Q. We understand that 9,000 cattle a week are slaughtered by you?

A. Yes, sir.

Q. And 20 out of these have been condemned?

A. Yes, sir.

By Colonel DENBY:

Q. Can you tell us what kind of diseases these 20 developed?

A. Largely tuberculosis.

Q. Then after the meat has passed these two post-mortem examinations what is done with it?

A. It is thoroughly washed and cleaned and ready for the chilling rooms, and there employees of the Government do the stamping or tagging, as the case may be.

Q. Where is that done?

A. On the beds where the cattle are killed.

Q. In that killing room?

A. Yes, sir.

Q. Now explain to us all about the tagging and stamping.

A. When the tagging or inspection of the cattle was started in 1892, every animal was tagged with a tag showing it was Government-inspected beef and put on with a wire stem. The Government found that expensive, both as to the amount of help needed and tags, and they started to stamp beef with rubber stamps, using indelible ink. They use a stamp 3 inches long, with the letters "U. S. No. 3" in the center, showing the animal is United States inspected and killed at No. 3 abattoir.

Q. The man that stamps, does he inspect the beef, too?

A. No, sir.

Q. He simply stamps it?

A. He simply stamps it. The inspector of the beds, if he finds an animal which he considers unfit for food, condemns it with a "condemned" tag.

Q. That is the third inspection the animal has gone through with?

A. No; the same inspection I spoke of—of examining the intestines and vitals. If he finds an animal he wishes to condemn, he puts on a "condemned" tag.

Q. What kind of a tag is that?

A. A large yellow tag.

Q. And then what becomes of the beef?

A. Cut down and sent to the tank room under his supervision, and he attends to it every time.

Q. What becomes of it then?

A. It goes into a refuse tank.

Q. What is it used for there?

A. The grease obtained from it is used for pressing purposes, such as lubricating oils, and the balance is used for fertilizing.

Q. None of it is used for human consumption?

A. No. The animal is practically a dead loss to Swift & Co., except the hide.

Q. You stamp this beef after it is prepared; for what market is it stamped?

A. All domestic beef used in this country is stamped with a Government stamp. All export beef is tagged with a Government tag.

Q. You mean by export beef that goes to other countries?

A. To London and Liverpool we export largely.

Q. I want to be certain about that. You know export beef is drunk all over the United States. Is that the case with your beef?

A. No, sir.

Q. How do you mark export beef?

A. There is no particular mark on the beef. We know when we dress it that it is for export purposes. There is no particular mark. We say to the Government official, "Here are so many beeves for export. We want these cattle tagged."

Q. What kind of a tag does he put on?

A. A tag issued by the Department of Agriculture at Washington. It says on it, "U. S. Inspected according to act of March 3, 1892. J. Sterling Morton, Secretary."

Q. How is it fastened on?

A. With a wire tag, and then a wire seal is compressed with "U. S." on it.

Q. That tag remains on the beef until it gets to its destination?

A. Yes, sir. The only way to get it out is to cut it out.

Q. And that is on all beef that goes abroad?

A. Yes, sir.

Q. And that is put on by the Government inspector?

A. Yes, sir.

Q. Well, with regard to the marking, how is it done—the stamp; what part of the beef do you put it on?

A. It is stamped on the hind legs and on the brisket—on the forequarters—which is on the breast of the forequarters. We put one impression on each quarter.

Q. Then the beef has passed, so far as the Government is concerned?

A. Yes, sir.

Q. Then what do you do with it?

A. It is then run into the cooling rooms where the beef is chilled. The room is at the temperature of 40° to 45° . When the back cooler is filled it is pushed to the front cooler. That cooler will be at the temperature the next morning after the animal is killed of 38° to 40° . The second day after the beef is killed it will be 34° to 36° , and we aim to ship beef forty-eight hours after killed, giving that length of time to get fit to ship.

Q. How is it cooled?

A. It is cooled with cold brine, which in turn is chilled by ice machines, ammonia in ice machines.

Q. Then the beef is ready to go wherever you want to send it?

A. Yes, sir.

Q. What is done with it then?

A. It is then quartered, each side of the beef cut in two, and loaded into the cars, refrigerator cars, for the point of destination.

Q. Whose business is it to put it into the cars?

A. The loading foreman, Mr. Buckingham.

Q. Is he here?

A. Yes, sir. It is under his direct charge.

Q. Do you superintend him?

A. Yes, sir.

Q. Well, what kind of a car is a refrigerator car?

A. It is built on practically the same lines as an ordinary box car, only the walls are heavily insulated to keep out the heat. The roof and walls are insulated with pulverized cork. In either end of the car are four tanks, into which we put the ice and salt.

Q. You don't use ammonia?

A. Not on the cars. We put in cracked ice and salt.

Q. And that produces what temperature?

A. In hot weather we get the cars anywhere from 33° to 38°.

Q. What do you do with the cars before you put anything in them?

A. I might add that the cars are always returned empty to the points of shipment?

Q. That is done in every case?

A. Yes, sir; every time a car goes out and is returned it is washed and left open a day or two. If we do not use them immediately, they may be left open a week.

Q. When the beef is put into the car, tell us whether there is any covering on it of any kind?

A. For export purposes there is a cover consisting of a large cloth bag into which the large quarters are put.

Q. How for domestic?

A. There is none for domestic.

Q. What is the object of putting the beef into the bags?

A. To keep the beef from chafing on shipboard and to keep the beef clean. The beef that men handle into and out of the cars can be kept very nicely; but when we put it on shipboard, it is handled so much that it would become unclean if it were not put into these bags.

Q. When the beef goes into this car, what becomes of it; where does it go?

A. To whatever points it is to be consigned. The cars are then—I might add the cars are all iced two days prior to the loading of the beef, so as to get them into the best possible condition as to temperature; and when the beef is loaded, the car is sealed up and resealed by ourselves with our own seal for our own protection.

Q. Will you explain that seal business to us?

A. It is an ordinary car seal, such as is used by the railroads, and we seal it with our own sealing clamps, which have Swift & Co.'s initials on them.

Q. Where do you put that; on the door?

A. On the door, on either side of the car.

Q. Does anybody else seal it besides you?

A. The railroads to whom it is consigned.

Q. Do you send anyone with the train?

A. No, sir; not unless on special occasions. There is such an amount of beef going all the time that we have regular icing stations at different points and the cars are iced every twenty-four hours.

Q. You ice every twenty-four hours?

A. In hot weather.

Q. This beef arrives at a port and goes aboard a ship, does it?

A. For export purposes, yes, sir.

Q. How do you know, Mr. Wilder, what beef you want for export purposes and what do you do with that particular beef, if anything?

A. The shipments of export beef are regulated by the sailing of the ships. For instance, we lease space on certain boats and we have to pay the same freight whether the cargo is put on or not; consequently the sailing of these boats regulates our shipments for export—shipments to Liverpool and London. We have at least eight days' notice of the sailing of the vessel containing a refrigerator. That information is wired to Chicago and our cattle buyer goes out with the information that he wants to-day, say, 500 cattle for a certain boat to sail eight days hence. He buys these cattle on the market, of the quality and weight suitable for that particular shipment. The cattle are driven to the packing house and the information is given that these cattle are to be killed for export shipment for a certain date, the boat leaving Boston such a date, and the information is general in all departments that these are export cattle.

Q. Does this man who buys these 500 cattle—does he buy any particular, special cattle for any particular special market?

A. He buys cattle—you mean for export shipment?

Q. I mean, suppose cattle are to go to London, or some other place, does he specially select cattle for this place?

A. Yes, sir. He knows beforehand the class of beef needed for that point. Of course, being familiar with that, in going around yards, if he sees cattle he knows will suit, he buys them.

Q. Do you send a different class of cattle to different localities?

A. Yes, sir.

Q. What kind of cattle would you send to Boston?

A. Boston uses the best beef of any city in this country. The best quality of beef goes to Boston.

Q. Then you give orders for a particular character of beef to go to Boston?

A. If we have orders for beef to go to Boston, the shipping clerk knows the quality of beef they need at that point, and he ships it. The buyer in the yards, when buying cattle, knows how many heavy ones and light ones he wants for general use and buys accordingly.

Q. And when you send to New York—

A. New York uses some heavy beef, but not much. Baltimore uses the lightest beef in the country. If we sent the grade of Boston beef to Baltimore we never would end losing money.

Q. Do you know why that is?

A. I can not tell you. It is only the demands of the market.

Q. You have houses in various cities?

A. Yes, sir.

Q. Refrigerating houses?

A. Yes, sir.

Q. And what do you do with your meat in those houses?

A. The meat is all sold to the retail butchers.

Q. Have you a house in Washington?

A. Yes, sir. G. F. Swift & Co. is the name of the house at this point. The beef is unloaded direct from the car to the refrigerator. There it is on sale by the retail butchers throughout the city or to anyone who wishes to buy it. We do not retail beef.

Q. Have you any place of that kind in the South, or is it in the East and North?

A. There is a place in Atlanta, Ga., and Charleston, S. C.

Q. And you send meat to Atlanta and Charleston?

A. Yes, sir; all the year round.

Q. Well, now, I was leading you up to the proposition as to whether, when the Government ordered meat, for instance, for Porto Rico—take that first—would you know that the Government wanted it for Porto Rico?

A. Yes, sir; we would know that it would be wanted for Porto Rico.

Q. You would get that order, would you?

A. Yes, sir.

Q. And then what would you do?

A. All orders which we have received from the Government for beef has been ordered for immediate shipment. In fact, we have in one or two instances made the shipment on the day we received the order.

Q. Why was that?

A. Because they wanted it shipped immediately to make connection with the boats. Consequently we went into our chilling rooms to pick out the beef for domestic purposes according to grade and quality, and that meat was shipped. When we killed it we did not know where it would be shipped.

Q. Was all the beef the Government ordered from your firm for Porto Rico, Santiago, and Cuba shipped from Chicago?

A. I think there were five cars went from the Kansas City house of Swift & Co., and the balance went from Chicago.

Q. Then how was this beef selected that the Government ordered?

A. We would go right into the cooler and pick out the beef that would fill the specifications according to weight and quality.

Q. Would you take the beef marked "export?"

A. No, sir.

Q. That beef that was stamped?

A. That was killed for domestic purposes.

By Governor WOODBURY:

Q. What are the specifications of the Government as to weight and quality?

Captain HOWELL. It called for the best quality of beef.

A. I can not state as to the quality. I think you have a copy of the specifications.

Captain HOWELL. (Copy of contract handed witness.) You will find from that what kind of beef you were to furnish.

By Colonel DENBY:

Q. Tell us whether this beef, inspected by the Government officers, is inspected any more before it gets into the hands of the men who are to use it?

A. No, sir; here are the specifications.

By Captain HOWELL:

Q. You say you found what it says?

A. In section 3: "The fresh beef to be furnished by the party of the second part under this contract shall be of uniform good quality from fat steers, United States Government inspected, weighing not less than 600 pounds dressed weight per carcass and shall be refrigerated, chilled, or frozen in quantities according as it shall be called for by the Commissary-General of Subsistence, United States Army."

By Colonel DENBY:

Q. Now, tell whether that contract was complied with as far as you know?

A. Yes, sir.

Q. You did select that beef put aboard these refrigerator cars?

A. Yes, sir.

Q. And it went aboard ship and it was put aboard another refrigerator?

A. Yes, sir.

Q. Did that belong to your firm?

A. No; the refrigerator on the ship did not belong to the firm. The boat in question had been in the dressed-beef business for several years between New York and Liverpool, and when taken by the Government for transport service Mr. Gardner was asked to make a careful examination.

Q. We will have Mr. Gardner himself, and he can speak of that. This refrigerator, then, was leased or hired?

A. It was operated by a paid employee of Swift & Co.

Q. You had a man aboard to operate the refrigerator?

A. Yes, sir.

Q. Do you personally know or remember about a shipment made of beef which went to Porto Rico?

A. Not as to details. I know in a general way, but I can not say I—

Q. You know in a general way that all the beef delivered complied with the contract?

A. Yes, sir.

Q. But you can not particularly state with regard to any particular lot that went to Porto Rico and Cuba?

A. No, sir.

Q. Do you know anything about the condition of the beef when it has been some time—say when the beef reaches its destination in going to Porto Rico—as to whether it suffers any change or not?

A. I could not state as to that particular trip what would be the condition there. I do know the condition of beef that is held for any length of time under good conditions.

Q. Well, we have had some proof here with regard to beef having a beard or fringe or mold on it. Do you know anything about these terms technically in this business?

A. Yes, sir.

Q. Tell us about the condition of the beef in that regard.

A. There seems to be on beef held any length of time in refrigerators, say, three or four weeks, a sort of fungus growth, which is often termed beard or whiskers with the trade, which is a sign of the ripening of the beef, and beef in that condition is very much better than beef eaten before it is thoroughly ripened.

Q. Where does this beard or whiskers, or whatever you call it, appear, on the fat or meat?

A. On both; the fat and exposed surface of the meat. In that connection I might say that in Chicago, for instance, we sell to large wholesalers of beef a large amount of cattle, who will, perhaps, buy 100 cattle at a time. They cut these cattle down, cut out the ribs and loins and take them to their own chill rooms, where they hold them and supply the best hotels—the Palmer House, Auditorium, etc. The Palmer House will order to-day 10 ribs and 10 loins, and they will be taken out of the cooler in exactly the condition you state and sold to these hotels out of the wholesalers' cooler, he having aged the beef. The wholesale dealer orders out these cuts, and he in turn puts in some more for them, and he gets an advance price on that meat for the fact that he ages it for these people.

Q. Now this, then, that you say is aged, does this have this beard or whiskers on it?

A. Yes, sir.

Q. What effect does that have on the beef?

A. It has the effect of ripening it. It is really the dissolving of the tissues of the meat. The juices of the meat dissolve the tissues, which makes it not only palatable, but of better flavor.

Q. Do they cut it off when they cook it?

A. They take the exposed part of the meat and take off a thin slice, and the fatty part they just wipe it off with a cloth.

Q. Then you don't regard this mold as being deleterious?

A. Not in the least.

Q. It is rather the opposite?

A. Quite the opposite?

Q. It is better beef?

A. It is better beef.

Q. What is the extent of your business in selling slaughtered beef?

A. We are slaughtering on an average of 22,000 a week at all points.

Q. And where do you send this meat in general?

A. All over the United States and to Liverpool and London.

Q. Not on the Continent?

A. Not on the Continent.

Q. Do you sell much to London?

A. Yes, sir; a large amount.

Q. And to Liverpool?

A. Yes, sir.

Q. Have you ever had any complaints as to the character of your meat from any American city or London or Liverpool?

A. No, sir.

Q. Never have?

A. No, sir.

Q. That meat is all treated in the manner and form you describe?

A. Yes, sir.

Q. The meat the Government got was treated in the same way?

A. Precisely. When we got the order we did not know who it was for.

Q. Have you had any complaint from the Government as to the character of the meat?

A. Not as to the character. We have had complaint of the condition of the *Manitoba* shipment.

Q. That went to Porto Rico?

A. Yes, sir.

Q. You had complaint of that beef?

A. Yes, sir.

Q. Who from?

A. I think it reached us from the Commissary Department. I can not give you the details.

Q. What was the character of the complaint?

A. That the beef was unfit for use on arrival.

Q. What became of it?

A. I understand the beef was held on board the boat for some time and was afterwards thrown overboard.

Q. Do you know how that happened, Mr. Wilder; was that the only case in which you had a complaint during the war?

A. To my knowledge.

Q. There was a lot thrown from the *Manitoba*?

A. Yes; at Montauk Point.

Q. Had that beef been at Porto Rico?

A. It had. It left Chicago July 29, and I did not know where it was in transit; but it was thrown overboard September 18.

Q. Do you know in general that the beef went to Porto Rico?

A. Yes, sir; but after it left Porto Rico I do not know where it went.

Q. Did you know the boat caught on a reef?

A. I have heard it.

Q. Then it went to Porto Rico and came back to New York, did it?

A. I understand that the boat went to Porto Rico and there was refused, and it went to some other point—I can not name it—about 65 miles, and then returned to Porto Rico, and about 30,000 pounds of beef at that time was discharged and consumed and was in good condition. Ponce, I think, was the point.

Q. Then did it come back to New York?

A. They laid there some time and returned to New York.

Q. How do you account for the fact that that beef spoiled, if it did spoil?

A. It is quite easily accounted for, especially between July 30 and September 18. I am positive the beef was in good condition when it reached Porto Rico.

Q. Is that the only case you know of in which the beef was returned?

A. Yes, sir. I will say in that connection we have been in the export business ten years, exporting fresh beef to London and Liverpool right in July and August (which is our heaviest killing season), and the beef is anywhere from eighteen to twenty-eight days in transit, and we have never lost a quarter of beef and have never had a complaint about it.

Q. Do you still keep up that trade?

A. Yes, sir.

Q. How long have you yourself been in this business?

A. About twenty-two years.

Q. How did you commence?

A. I started with Swift & Co. eighteen years ago on the slaughtering beds.

Q. Were you a butcher?

A. Yes, sir.

Q. And you have grown up until you are the superintendent of that plant?

A. General superintendent of all the plants.

By Captain HOWELL:

Q. There have been charges that the beef that went to Porto Rico was filled with chemical substances. I want to know if any which Swift & Co. furnished had any other process than the ice applied to it?

A. No, sir.

Q. Were there any chemicals used about it at all?

A. None whatever.

Q. If there had been, you would have known it?

A. Yes, sir.

Q. There was no substance injected into that beef?

A. None in the least.

Q. No boracic acid?

A. No, sir.

Q. No salicylic acid?

A. Nothing of that kind was.

Q. There was nothing but the ice process; that is, it was the refrigerating process?

A. It was the refrigerating process. The beef was washed with hot water. That water was so hot a man could not stand it with his hands in it, so they used long brushes, and then there was the refrigerating process.

Q. Is that true about the beef that was furnished by Swift & Co.?

A. Yes, sir.

Q. And any statement to the contrary is not true?

A. Is not true; it is absolutely false.

By Governor WOODBURY:

Q. How do you cure that beef, Mr. Wilder, according to weights or conditions, or both?

A. Both are considered in the curing.

Q. Do you do any canning at all?

A. None whatever.

Q. Do you put up any roast or boiled beef?

A. No, sir.

Q. Have any recent reports reached you in regard to the method of preparation to preserve meat?

A. Under the term of embalming I have read it in the newspapers.

Q. How recently?

A. I have seen sketches of it in the papers for the last sixty days.

Q. Were there any reports ever made to you of any sorts of suspicion that your beef was prepared in any other way than you have stated until that time?

A. No, sir.

Q. Have you ever had any application from any inventors of processes to allow them to use their process?

A. Yes, sir.

Q. Have you ever had an application from a man by the name of Powell?

A. I could not say. I might answer that by saying that applications of that kind might be received by Swift & Co. They never came to me. They would hit the wastebasket before they would come to me.

Q. Have you ever prepared any beef for the use or for the purpose of exhibition of any of these inventors at their instance?

A. No, sir.

Q. Slaughtered beef has never been prepared in your establishment in that way?

A. None at all.

By General McCook:

Q. Suppose a man came to you with any of these processes, what would you say to him?

A. I would wish him success and hope he would be really successful, but he could not get any test from me.

By Captain HOWELL:

Q. Is there really any use to do it with the beef as you keep it?

A. No, sir.

Q. It would be an extra expense?

A. It would be an extra expense and would be a detriment to the beef. From my practical knowledge of the beef business, the thing to do is to get it in that cooler and keep it there. I don't know of any other process.

By General McCook:

Q. There can not be any decay without moisture?

A. No, sir; our cooling rooms are built on the principle that you can go in and strike a match anywhere on the wall or posts, and that is an evidence that we have a dry process. If we did not do it, we could not ship our beef to New York, London, and Liverpool in good condition.

By Governor WOODBURY:

Q. Have you any experience so that you can say how long refrigerated beef will keep during the hottest weather that we have in this country when taken out and kept in a shaded place and covered without any ice?

A. No; I can not say that I have had actual experience in that particular line.

Q. You have not any official reports or reports that would enable you to say?

A. No, sir.

By Colonel DENBY:

Q. Who paid the cost of transportation of the beef in the Government transport?

A. The Government, I understand. My understanding of the contract was that all supplies of beef was to be passed on the transport.

Q. You said that the beef for domestic purposes was shipped in cars refrigerated by ice and salt. The beef was shipped in that way?

A. Yes, sir.

Q. The Government beef and all?

A. Yes, sir; all beef.

Q. There was no ammonia or refrigerator on the cars?

A. None whatever.

Q. Can you tell us what the approximate value of the export trade is?

A. By Swift & Co.?

Q. Yes, sir.

A. Between 2,500 and 3,000 cattle a week.

Q. I mean export.

A. That's what I mean.

Q. Between 2,500 and 3,000 a week?

A. Yes, sir.

Q. And every week in the year?

A. Some weeks it will run less and some more; but that will be about the average.

Q. What is the average weight of each one of these for export alone?

A. Why, they will average 600 and 650.

Q. Do you select the best for export?

A. No; not the best. It is a good quality of beef. The very best beef would not give us any profit.

Q. That all goes to England?

A. Yes, sir.

Q. None goes to Germany?

A. None does. The laws are such that we can not get in there.

Q. Do you send any to France?

A. No, sir.

Q. What is the reason you don't send any to Germany?

A. The laws are peculiar there. I believe in Germany they will allow dressed beef to come in if the lungs are attached for their inspection.

Q. And do you find you can not attach the lungs?

A. It is not practical to chill them and keep them attached to the animal.

By Dr. CONNER:

Q. Is that to determine whether or not the animal has had tuberculosis?

A. Yes, sir.

Q. You speak of the rapid inspection made covering the kidneys, intestines, and lungs. Is it possible to determine in half a minute whether or not an animal is tubercular?

A. Yes, sir; any sign of tubercle on the animal would be determined the instant you look at it.

Q. Are you familiar enough with the matter to know these facts?

A. Yes, sir.

Q. Will you be kind enough to tell us in what way you could absolutely and definitely at a glance tell by the exterior of the lung whether an animal was tubercular or not?

A. There is a growth on the lung, liver, and intestines that looks very much like fish spawn; the nearest I can describe, it looks like fish spawn.

Q. Is that always on the exterior?

A. Yes, sir.

Q. Will you find at times that there are scars, etc., that the animal had been tubercular if the exterior does not show it?

A. I have seen cases of that kind. I have seen cases when the lungs looked clear, but you will find an abscess.

Q. Can you determine all that in this half minute?

A. Yes, sir.

Q. Can you determine whether or not in the substance of the liver there is a little sign—a nodule?

A. Yes, sir.

By Colonel DENBY:

Q. I understand this man that walks along and tests all this work in such a short time is a Government appointee of the United States?

A. Yes, sir.

Q. You don't appoint him?

A. No, sir.

Q. If, therefore, he fails in inspecting this beef, whose fault is it?

A. It rests on the Department of Agriculture.

Q. The Department of Agriculture understands the length of time it takes for a man to examine beef?

A. Yes, sir.

Q. And it is their business to see that he does this business well?

A. Yes, sir.

Q. And Dr. Devoe is at the head of that?

A. Yes, sir.

By Dr. CONNER:

Q. Is any part of the payment of these inspectors made by the packing company?

A. No, sir.

By Captain HOWELL:

Q. Do you give them all the time they want?

A. Yes, sir.

By Dr. CONNER:

Q. What becomes of the animal?

A. If there is any doubt, he puts his tag on the animal and says, "I want that fellow."

Q. Has there ever been any controversy as to whether or not this beef ought to be condemned?

A. No, sir.

Q. Do you submit absolutely to them?

A. Absolutely.

Q. If they say, "That beef must be thrown out," it is thrown out?

A. We have no voice in the matter.

By Colonel DENBY:

Q. Have you anything yourself that you would like to state with regard to the business that comes within your personal knowledge?

A. I don't know that I can say anything further than I have said that would be of interest.

WASHINGTON, D. C., *January 9, 1899.*

TESTIMONY OF EDWIN BUCKINGHAM.

Mr. EDWIN BUCKINGHAM appeared, was sworn, and testified as follows:

By Colonel DENBY:

Q. State your name, residence, and occupation.

A. Edwin Buckingham; Chicago; with Swift & Co., Union Stock Yards.

Q. How long have you been with Swift & Co.?

A. Eighteen years.

Q. What was your business when you first went?

A. In the dressed beef shipping.

Q. And what has been your business since?

A. The same business.

Q. You mean to say that you have charge of the shipping of dressed beef?

A. Yes, sir.

Q. That means putting it on the cars?

A. Yes, sir.

Q. What have you got to do, if anything, with the chill room and loading?

A. I have full charge of the dressed beef from the time it is dressed and put in the cooling room until it is loaded on the cars.

Q. Are you the superintendent of the beef after it gets in the chill room until it leaves; is that it?

A. Yes, sir.

Q. Well, when the beef is delivered in the chill room, what do you do with it?

A. It is left there probably forty-eight hours sometimes.

Q. What is the object of that?

A. To allow it to cool thoroughly and get the animal heat out of it.

Q. How is it arranged; hung up, or laid down, or what?

A. Each side is run on a trolley.

Q. At that time the beef is cut in half, is it?

A. Yes, sir.

Q. And you call each one-half a side?

A. Yes, sir.

Q. And hang it on the trolley?

A. Yes, sir.

Q. Well, how is it hung?

A. On a truck, properly speaking. It is a round truck with a groove in it, and this groove runs along on a steel rail about half an inch wide [indicating]; it is of steel, 6 inches in diameter, and grooved out, and there is a hook extending down around that goes through the shank of the beef, and every side hangs on these trucks.

Q. Do the sides touch each other?

A. No, sir; we don't allow them to touch each other.

Q. Then you say that beef has just been killed?

A. Yes, sir.

Q. And it stays there how long?

A. Forty-eight hours.

Q. What is the temperature?

A. Well, it has a temperature of 45, probably 48; that is, the first day it is killed—or the same day it is killed—and it gradually lowers until the following morning, when we have it down to 40 or a little below. That is the temperature we try to maintain.

Q. After these forty-eight hours, what do you do with the beef?

A. We prepare it for shipment.

Q. How do you prepare it for shipment?

A. We trim it; that is, trim the neck up a little bit and quarter it; that is, just running the knife straight around and divide the hind quarter from the fore quarter.

Q. You make it into four parts?

A. Yes, sir.

Q. And what do you do with it then?

A. Run it out on a loading dock and load it into the cars.

Q. Is it tagged while under your control?

A. Yes, sir; the tagging is while under my control.

Q. Is it stamped while under your control or does it come to you stamped and tagged?

A. I don't understand that.

Q. I understand when you send beef abroad you have a tag on it?

A. You have reference to the Government tag?

Q. Yes, sir.

A. Yes, sir.

Q. When is that done?

A. Before I take charge of the beef.

Q. Stamped before you take charge?

A. Yes, sir.

Q. It comes to you tagged and stamped?

A. Yes, sir.

Q. And you have the Government's permission to send it abroad or for domestic use?

A. Yes, sir.

Q. Do you send out any beef that is not tagged or stamped?

A. No, sir.

Q. You stamp domestic beef and tag foreign beef?

A. The Government men do that.

Q. You have nothing to do with that?

A. No, sir.

Q. Have you any control over the question as to whether or not it ought to be tagged or stamped?

A. No, sir.

Q. It reaches you, then, in that condition?

A. Yes, sir.

Q. Then you cut it up, and then what do you do with it?

A. Run it out to the loading dock, and from there it is carried by men onto the cars, and each man takes a quarter on his shoulder.

Q. How far is it from the loading dock to the car?

A. Very close; just outside the building.

Q. Have you anything to do with preparing those cars for shipment?

A. No, sir; only in a general way to see that they are all right.

Q. Is that part of your business?

A. Yes, sir.

Q. What do you mean by seeing that they are all right?

A. Seeing that the cars are cleaned and have the proper temperature.

Q. You inspect the car before the meat goes into it?

A. Yes, sir.

Q. In point of fact, what has been the condition of all the cars that have come under your knowledge?

A. Always good, sir.

Q. How are they cleaned?

A. With hot water—that is, the interior of the car—aired, and properly iced. I might say there is a thermometer put in every one of these cars at the time the icing is done.

Q. How is the icing done?

A. It is put in from the top of the cars.

Q. You have cylinders?

A. Yes, sir; four tanks on each end of the car. It opens from the top, and they run the entire depth of the car.

Q. You fill these tanks with what?

A. Ice and salt.

Q. And that produces what temperature?

A. Well, from 34 to 38; sometimes a little lower.

Q. Do you know when you load the car where the beef is going?

A. Generally; yes, sir.

Q. Did you know that any of this beef was going to Porto Rico or any beef was going to Porto Rico?

A. I don't believe I did personally know that.

Q. Did you know that any was going to Cuba? I want to inquire about particular lots, if you know it.

A. My instructions went as far as the seaboard. I didn't know the name of the steamer.

- Q. After you put this beef on the car, then what is done?
A. The car is sealed; that is, either door is sealed.
Q. By you?
A. Yes, sir.
Q. Is it sealed by anybody else?
A. The railroad.
Q. Then you have two seals on it?
A. Yes, sir.
Q. And then the car leaves for its destination. Do you send anyone with it?
A. No, sir; not generally.
Q. Well, now, do you inspect or look at this beef that you put in the cars?
A. Yes, sir.
Q. Do you see every quarter?
A. Yes, sir.
Q. Suppose that you saw a quarter of beef that was bad, what would you do?
A. We would not ship a quarter that was bad.
Q. Did you ever have a quarter that was bad?
A. No, sir.
Q. And you would know whether this beef was in good condition or not?
A. Certainly.
Q. Was it in good condition?
A. Yes, sir.
Q. All the beef you shipped, say, from April to the end of the war, will you tell us whether it was in good condition or not?
A. It was in good condition; yes, sir.
Q. After that beef reaches you, is it treated in any way?
A. No, sir.
Q. Does anybody put any chemical article on it or in it?
A. No, sir.
Q. Is it touched by anyone except in the manner and form you have stated?
A. No, sir.
Q. Is anything done to that beef except to cut it up?
A. That's all.
Q. Then the beef is absolutely pure, natural beef, is it?
A. Yes, sir.
Q. You say, then, under oath, that in your department the beef has never been tampered with?
A. Yes, sir.
Q. Nothing whatever is done with it?
A. Nothing whatever.
Q. No chemical whatever been used?
A. No, sir.
Q. To your knowledge, has any chemical ever been used by Swift & Co.?
A. No, sir.
Q. Has anything ever been done to the beef except in the way you have stated?
A. No, sir.
Q. These cars, of course, go and come, do they not?
A. Yes, sir.
Q. Have you ever detected any odor in these cars?
A. No, sir.
Q. Have you ever detected any smell, except, of course, there is a smell of natural beef?
A. A slight smell.
Q. A slight smell of what?
A. Natural beef.

Q. Have you ever detected any impure smell?

A. No, sir.

Q. Have you ever detected any smell indicating that there has been putrid beef in the car?

A. No, sir.

Q. How often do you renew that ice and salt?

A. In the summer—in the real hot weather—about every day.

Q. What is the greatest distance you have ever sent beef in that way—I mean by rail?

A. I could not tell you the exact distance. I can give you the points.

Q. Well, give us the points.

A. From Kansas City to New York and Boston. I think that is about the longest trip on the cars.

Q. Where do you send from Chicago?

A. To New York and Boston and Maine—all around the State of Maine.

Q. Washington?

A. Yes, sir.

Q. Is there anything else, Mr. Buckingham, that suggests itself to you that applies to the questions we are examining; if there is, we would be glad to hear you—or do you weigh the beef?

A. Yes, sir; we weigh the beef.

Q. Each quarter?

A. Yes, sir—that is, excuse me, not for domestic purposes, we don't weigh each quarter.

Q. You don't weigh each quarter for domestic purposes?

A. No, sir.

Q. You weigh each quarter for export purposes?

A. Yes, sir.

Q. And you keep a record?

A. Yes, sir.

Q. How do you know when beef is for export or domestic?

A. There is a difference in the preparation for shipment.

Q. What is it?

A. The domestic beef is shipped just as it is in the cooler, naked; and for export there is a bag put on each quarter and sewed up.

Q. What is the bag made of?

A. Muslin.

Q. What do you put it on the beef for?

A. To keep it clean, and then it prevents chafing.

Q. Why do you have to keep it clean?

A. Well, it has to be handled so often.

Q. How often is it handled?

A. Of course it is handled from the car to the steamer, and, generally speaking, it has to be hoisted and lowered into the hold of the vessel, and when it gets to its destination it has to be handled again, probably two or three times.

Q. Do you call that cheese cloth?

A. Yes, sir; cheese cloth.

Q. But domestic beef you don't ship that way?

A. No, sir; just ship it naked.

Q. A United States stamp is on all the beef?

A. Yes, sir.

Q. Either stamped or tagged?

A. Yes, sir; every quarter.

Q. To your knowledge has there ever been any controversy between the Govern-

ment inspectors and yourself or any member of the company with regard to the beef?

A. No, sir.

Q. If the inspector ordered the beef to be thrown aside what would be done?

A. It would be taken directly from the slaughterhouse. This beef does not leave the killing beds.

Q. In that regard he is arbitrary?

A. Yes, sir.

Q. And you obey his orders?

A. Yes, sir.

WASHINGTON, D. C., *January 9, 1899.*

TESTIMONY OF JOHN J. MURPHY.

Mr. JOHN J. MURPHY appeared before the commission, was sworn, and testified as follows:

By Colonel DENBY:

Q. State your name, age, and residence.

A. John J. Murphy, Chicago; age, 35.

Q. What is your occupation?

A. To look after the general handling of our refrigerator cars and the cargo of Swift & Co.

Q. You say "our." What do you mean by that?

A. Swift & Co.

Q. How long have you been employed by Swift & Co.?

A. About fifteen years.

Q. In what capacity did you commence there?

A. As an employee at one of their ice houses—ice-house foreman.

Q. And afterwards what has been your position?

A. Looking after the refrigerator cars and icing in transit.

Q. Now you have charge of the refrigerator cars and the transit of the beef?

A. Yes, sir.

Q. Mr. Murphy, tell us how these refrigerator cars are made. I don't want you to go into very great details.

A. The general size and shape is the same as an ordinary freight car, except they are insulated—the floor, ceiling, sides, and ends.

Q. How is that done?

A. By hard felt, insulating paper, and series of air spaces.

Q. How do you refrigerate the cars?

A. They are fitted with galvanized-iron tanks.

Q. How many?

A. Four in each end of the car.

Q. What is the size of the car?

A. Thirty-two feet long.

Q. Who do they belong to?

A. Swift Refrigerator Transportation Company.

Q. Just tell us how you refrigerate it.

A. We aim to get the car ready about two days before we want to load it. The first thing we do is to wash the car out thoroughly with warm water and permit it to air out and become thoroughly dry.

Q. How long does that process take?

A. A good part of a day. It is after that that they are ready to be run up to

the ice houses and iced. The tanks are filled to their capacity with crushed ice and coarse rock salt and are again reiced the next day.

Q. What temperature do you produce?

A. In warm weather we hold the temperature from 36° to 40°.

Q. And how often is the ice renewed on a trip?

A. In warm weather we aim not to have the car exceed twenty-four to thirty hours without being reiced. We aim not to let the ice get down to not more than one-third. Sometimes it runs a little lower than that.

Q. Then you ice it en route, do you?

A. In transit; yes, sir.

Q. What have you to do with the loading, if anything?

A. In a general way, I see to the loading. It does not come directly under me, but I know how it is done.

Q. You simply control transportation?

A. Transportation and protection of the meat after put into the car until it arrives at its destination.

Q. Do you see the meat that goes on the car?

A. Yes, sir; more or less.

Q. Could you tell if anything were the matter with it, if it were decayed, for instance?

A. If I only had to inspect it with that end in view, I could.

Q. I ask you for the facts, not what you might do.

A. Yes, sir.

Q. Now the meat goes into the car. Then do you go into the car yourself, do you see the meat in the car?

A. Yes, sir.

Q. Then you see that everything is properly prepared; is that your business?

A. Yes, sir.

Q. And that meat is hung up?

A. Yes, sir.

Q. And you attend to the temperature?

A. Yes, sir.

Q. And then the car leaves and goes to its destination?

A. Yes, sir.

Q. Do you send anybody along with it?

A. No, sir.

Q. What is done with regard to closing the cars up?

A. They are closed by a seal by an employee of our company, and also they are sealed by a representative of the railroad line that is going to receive the car.

Q. How are they sealed?

A. We use a heavy metal seal of lead and the railroad company uses a similar one.

Q. Can you use that seal more than once?

A. No, sir.

Q. When you take it off the car, it is destroyed?

A. Yes, sir.

Q. Do you see to the sealing up of it yourself?

A. No, sir.

Q. But you have seen it done, and know it is done?

A. Yes, sir; I know how it is done.

Q. Then when the car gets to its destination what becomes of it there? Who has charge of it, if anybody?

A. As soon as it reaches its destination, the branch house or agency to whom it is consigned has control over it then.

Q. Well, suppose the beef is intended for shipment to Europe or any other point.

Have you any man at the point of destination to see to the moving of the beef from the car to the ship?

A. Yes, sir.

Q. You have a man employed?

A. Yes, sir; and I have general supervision of that also.

Q. Did you yourself ever do any of that work?

A. Yes, sir.

Q. I mean at the terminals where the beef is to go aboard the ship?

A. Yes, sir.

Q. You have done that?

A. At Portland, Montreal, Boston, New York, Newport News, and Port Tampa.

Q. I want to ask you about Newport News and Tampa. How many shipments of beef did you personally superintend the moving of from the cars to the ship at Newport News—I mean during the last war?

A. Two consignments.

Q. You personally know, then, the condition of the beef that went to Newport News, do you?

A. Yes, sir.

Q. Did you see that beef taken from the cars and put aboard the ships?

A. Yes, sir.

Q. And there were two shipments. Can you give us the time of that?

A. The first shipment was along the latter part of July. I can not give you the exact date.

Q. What boat did it go aboard?

A. The transport *Massachusetts*; approximately 200,000 pounds.

Q. Now confine yourself to that 200,000 pounds. Did you personally see that beef at Newport News?

A. Yes, sir.

Q. Did you see it taken from the cars and put aboard the ship?

A. Yes, sir.

Q. What was its condition?

A. It was good in every respect.

Q. If it had not been good, would you have known it?

A. I would.

Q. You put it, then, in the refrigerator aboard the ship?

A. Yes, sir.

Q. And after it got there, whose charge was it in?

A. Then under the charge of a refrigerator engineer whom we placed on the boat.

Q. One of your employees?

A. One of our own engineers.

Q. What were his instructions?

A. He had his instructions from our Mr. Gardner.

Q. Mr. Gardner is here?

A. Yes, sir.

Q. What were the general instructions given?

A. As to the working of the machine, necessary supplies for the machine, and keeping the temperature at a proper degree.

Q. That was one of the shipments you saw. There was another shipment to Newport News. When was that?

A. I loaded that on the 4th or 5th of August, on the *Manitoba*.

Q. How many pounds?

A. Approximately 300,000.

Q. What was the condition of that beef?

A. Very good.

Q. Then you sent one shipment to Cuba yourself personally from Newport News?

A. No; from Port Tampa.

Q. Port Tampa, I mean. About what time was that, Mr. Murphy?

A. About the middle of July.

Q. Do you know how many pounds?

A. About 200,000—10 carloads.

Q. These were all the shipments you personally superintended to go to Porto Rico or Cuba?

A. Yes, sir.

Q. Did any other meat go to these places?

A. We sent some to New York. I don't know what the destination of that was. That was handled by our New York agent.

Q. Now, as to this beef that went to Port Tampa and that you loaded at Newport News, what ship was that on?

A. That I loaded at Newport News?

Q. Yes, sir.

A. The first on the *Massachusetts*, and the second on the *Manitoba*.

Q. No; I mean the beef that went from Port Tampa to Cuba.

A. On the steamship *Mississippi*.

Q. What was the condition of that meat?

A. Very good.

Q. Now, will you tell us whether, while this beef was under your control—I understand it was under your control from the time it was moved from the cooler to the refrigerator car—can you tell us whether that was subjected to any chemical treatment?

A. No, sir.

Q. Had any chemicals been used in connection with it?

A. No, sir.

Q. Had anything been done to the beef except to prepare it as usual?

A. No, sir.

Q. At Swift & Co's., at any time, has there ever been a chemical used?

A. Not to my knowledge.

Q. Has anything ever been done to the beef except to cut it up and cool it to ship it in the manner and form you stated?

A. No, sir.

Q. While en route it was in sealed cars?

A. Yes, sir.

Q. After it got aboard the ships it was in the refrigerator rooms?

A. Yes, sir.

Q. Locked up?

A. Closed up; not open.

Q. At any time or place in transit did anybody have access to it?

A. No, sir; the seals were intact when I received it at seaboard.

Q. Did this beef have cheese cloth over it or not?

A. Yes, sir; it is all covered with cheese cloth.

Q. All you send abroad is covered with cheese cloth?

A. All export.

Q. Did this beef have any appearance or smell or any indication of having been treated chemically?

A. No, sir.

Q. Will you state whether it was treated chemically or not?

A. While under my charge, it was not.

Q. Had it been treated chemically before it reached you, as far as your knowledge goes?

A. As far as my knowledge goes, no.

Q. You don't know about any other shipments that may have been made from New York?

A. No, sir; no more than from reports I would get there from our representative which he made on beef going to London or Liverpool.

Q. I understand you control all the cars for all the shipments?

A. Yes, sir.

Q. Then if anything went to New York, although you were not at New York and do not know where it went, you knew the condition it was in when it left?

A. Yes, sir.

Q. Then, as to all the beef, not only the beef that went to Porto Rico and Cuba but as to all the beef that left to go anywhere during the last summer and fall, was it treated chemically, to your knowledge?

A. To my knowledge, no, sir.

Q. It was all good beef?

A. It was all good beef.

Q. What do you say as to whether there was any odor or bad smell in these cars after they came back from a trip, for instance?

A. Well, if the ice exhausts itself, on their return in warm weather they will smell a little strong. They are closed tight and accumulate heat, and the air would be a little foul.

Q. They are all closed up when they come back?

A. Sometimes the consignee is not careful enough to wash the car clean.

Q. After it gets back, what do you do with it?

A. Wash it out and clean it.

Q. And leave it open?

A. Yes, sir; and air it.

Q. Mr. Murphy, do you know anything about any mold or "whiskers" or "beard" on beef?

A. I have seen such.

Q. Will you explain that to us?

A. It can be carried in a refrigerating room three or four or five weeks, if necessary, and it will accumulate a little growth; it might be called a mildew; but it is not detrimental to the meat.

Q. Does that appear on all meat, or only occasionally?

A. When it is aged, certainly.

Q. What effect has it on the meat?

A. None.

Q. Is it removed before the meat is eaten?

A. It can be taken off with what we call the "cut." It would be trimmed off by cutting off a little slim sliver; and hard flesh can be wiped off.

Q. Is that used in Chicago?

A. Yes, sir.

Q. Do you know who it is sold to there?

A. To the retail trade.

Q. And who do they sell to?

A. Consumers.

Q. Have you ever had any complaints in Chicago or anywhere else as to this mold?

A. That would be lodged with the branch house selling the meat. It would not come to me.

Q. Wouldn't it come back to the firm?

A. Yes, sir.

Q. Have you ever heard of any?

A. Well, no; I do not know that I ever did; perhaps I did in a general way, but I can not recall any.

Q. In your opinion, then, does this mold hurt the beef or not?

A. It does not injure it.

Q. Does it improve it?

A. It is claimed it is a vast improvement. We have trade in Chicago that want it that way. I suppose it is the same in other cities.

Q. The Government inspector, as I understand, has nothing to do with the beef after it reaches you—the cooling room?

A. No, sir; I do not come in contact with the Government inspector at all.

By General WILSON:

Q. I have noticed from your answers in reply to questions as to whether or not chemicals had been used that you said they had not to your knowledge. Would you naturally have known of it if such a thing had been done?

A. Having access to all the departments of the plant, I naturally would.

By General McCook:

Q. Do you know of any process where they inject chemicals into beef?

A. I do not.

Q. You don't know anything about that at all?

A. No, sir.

Q. Did you ever hear of it?

A. Never heard of it being done; not with our firm.

By Captain HOWELL:

Q. No kind of acid put on the outside of the beef?

A. No, sir.

By Colonel DENBY:

Q. Mr. Murphy, have you anything to suggest of your own that I have not asked you about?

A. No; not that I know of, unless it would be my receiving the cars at the destination and prior to opening them to discharge the cargo that I made examination of the seals and found them intact. Of course, if I found them otherwise I would not receive them from the railroad company.

Q. Then, these shipments that went from Newport News and Port Tampa that you superintended, you did examine the seals?

A. Yes, sir.

Q. And you found them intact?

A. Found them intact.

Q. And nobody could have gotten into the car to do anything to this beef?

A. No, sir; the meat is not exposed in any shape or manner in reicing in transit.

Q. I understand the beef is carried by men from the car to the refrigerator aboard the ship?

A. Yes, sir.

Q. And it is all under your eye?

A. Yes, sir.

Q. And nothing could be done then without your knowing it?

A. No, sir.

By Captain HOWELL:

Q. When you take that beef out of the car and put it on board the vessel, are there any chemicals injected into it there?

A. No, sir.

Q. Did you have to make any other preparations of that beef to keep it on board the vessel that you did not make in the car?

A. None whatever.

WASHINGTON, D. C., January 9, 1899.

TESTIMONY OF HORACE C. GARDNER.

Mr. HORACE C. GARDNER appeared before the commission, was sworn, and testified as follows:

By Colonel DENBY:

Q. State your name, your residence, and your occupation?

A. Horace C. Gardner, 4448 Indiana avenue, Chicago, Ill. By occupation I am manager of construction and chemical department of Swift & Co., meat packers.

Q. How long have you been employed by Swift & Co.?

A. Fifteen years.

Q. In what capacities?

A. For a short time, and temporarily, when I first went with them, as foreman in their railroad department, and next after that in charge of the icing of the refrigerator cars and other apparatus and transportation for about two years, and for the remaining time practically in the same position I now hold.

Q. What connection did you have officially with the transports used during last summer and particularly in the war with Spain?

A. I inspected in New York Harbor, at the request of the Commissary-General, quite a number of vessels.

Q. You mean Commissary-General of the United States, General Eagan?

A. Yes, sir—General Eagan; quite a number of vessels, with a view to ascertaining if they were fit for the transportation of meat, well suited to it. I made my reports to him on them.

Q. What ships did you examine, Mr. Gardner?

A. I examined the *Celtic King*, a vessel of the English registry in the Brooklyn Navy-Yard, that had been in the Australian meat-carrying trade. She was afterwards bought by the Navy and not by the Army. She was a good vessel. I examined the *Port Victor*, another vessel that had been in the Australian frozen-meat trade, and found her to be a pretty good vessel, although some changes would be necessary in her refrigerators. These changes I made and reported favorably on her, and the Army bought her. I examined the steamer *Obdam*, of the Netherlands American Line, and reported favorably on her as a fit vessel, and took measurements and made all preparations to put a refrigerator on her for carrying fresh meat, but received word from Washington within two or three days that it was thought best to retain her as a transport for men, as she had been a passenger ship and was better suited for that purpose. I thought that that was a very sensible conclusion. I examined the steamer *Panama*, which was one of the early prizes of the war, a little passenger vessel that was captured by the tug *Mangrove*. She was quite small and not well suited. I think she was bought in by the Army at auction—a good little vessel. I examined another vessel, the name of which I do not now recall, that had been running between New York and the West Indies carrying sugar. I found her decks and the entire woodwork were impregnated with sugar and molasses, so that she was unfit for carrying meat product. She lacked two safety bulkheads, which, I think, such vessels ought to have. I thought one little hole in her bottom would sink her, and I did not regard her as a fit vessel. The Government, I think, did not buy her. I examined another vessel belonging to some Americans living in New York, a vessel of French build. I am sorry to say I can not recall her name—quite a peculiar name. She was quite old, much deteriorated, and I reported her as hardly fit for the service. I examined the *Mobile*, the *Massachusetts*, the *Mohawk*, *Mississippi*, and the *Michigan*.

Q. The *Manitoba*?

A. No; I think the *Manitoba* was then on the way from London over. I think

not. I think that was all the Atlantic transport boats I examined, although I found they were all good, substantial vessels, having good power and speed, and they had refrigerators already on board, each vessel equipped with two refrigerating machines, duplicates. Some repairs were necessary, which I had executed. I did not see the *Manitoba* or the *Minnewaska*, of that line, which I understood at that time had been purchased, although I have for some years been acquainted with the vessels of that line and knew how they were equipped, and knew they were successful carriers of fresh meat. In fact, the drawings showing how they were to be fitted were sent to me for examination before the refrigerators were put in when the vessels were new.

By General McCook:

Q. Did you get those specifications from the builders at Belfast?

A. They came to me through the New York office of the Trans-Atlantic Line, but evidently came from the other side. I examined, also, the steamer *Roumanian*, which had been purchased as a transport ship, and found the *Roumanian* to be a large, roomy vessel, safe and staunch in every way. She was one of the first twin-screw vessels ever built, and she was a slow vessel and didn't have enough steam power. I thought it not advisable to take the steam power away to drive the refrigerator plant. That would make her still slower. I think she has been in the transporting service since then. I don't recollect any others. There may have been one or two more.

Q. You say that you put the refrigerating process in good condition?

A. Yes, sir.

Q. Did you examine them after the work had been done, to see whether they were in good condition?

A. Yes, sir.

Q. And what was the condition of the refrigerators aboard these various ships?

A. Mainly in good order, some small attentions being necessary.

Q. Did you have men aboard these ships employed by Swift & Co. to take charge of the refrigerators?

A. We put men aboard to do the repairs and put them in good order and afterwards, as called on to make shipments in these vessels, I sent engineers of our company to go with them.

Q. To accompany a ship and see that the refrigerating process was kept in good condition?

A. That was the idea; yes, sir.

Q. Then you had men aboard each one of these ships when your beef was aboard?

A. Every time.

Q. Now, explain what the process of the refrigerating aboard the ship was.

A. There were two processes. The *Port Victor* is refrigerated by a different process than the others. I will describe that first. It is what is known as the compressed-air process, and, briefly, consists in an air duct by which the air from the interior of the refrigerator is taken to the air-refrigerating machine. It is drawn into an air pump or air compressor and compressed to about 80 pounds per square inch. Like all volatile fluids, being compressed, it becomes hot, and it is discharged from this compressing cylinder in this hot state into a drum—a closed drum—that has running through it small copper tubes, through which water is circulated to cool the air while it is in that state of compression. That process cools the air in pressure of varying degrees of temperature, depending on the temperature of the water, to practically 75° or 80°. It passes from that drum, still under pressure, to another cylinder, where it is introduced exactly in the same way as steam is introduced into a steam cylinder, through a valve, and in fact exerts an expansive power on that cylinder, as steam exerts on a steam cylinder. That reproduces or makes available a portion of the power that is expended in the

first compression, the balance of the necessary power being made up by a third cylinder on the same machine, through which steam is used, the same as in ordinary steam engines. The air, after being discharged from this expansion cylinder, in the act of expansion, becomes very cold and passes from there through what is called a snow box, where the moisture in it is precipitated as snow on back into the refrigerator proper. That is the process constantly going on by which the air of the interior of the refrigerator is constantly passing through the machine, being cooled, depositing its snow, and being sent back to the refrigerator.

Q. What temperature does that produce?

A. The air itself on leaving the expansion cylinder is far below zero, but being small in volume and introduced in many places within the meat chamber, it does not produce anywhere near that effect in the refrigerator. In fact, it is in the power of the machine operator to maintain almost any reasonable temperature he desires in the meat chamber.

By Dr. CONNER:

Q. Between the freezing temperature and anything above that?

A. In fact, this *Port Victor* had been used as a freezer ship, and it would have been possible with that machinery to have frozen meat. Of course we did not run it at such low temperatures as that. not using it as frozen meat.

By Colonel DENBY:

Q. You had described, before you went out, the process of refrigerating by air; will you state whether that is satisfactory or not?

A. It is a satisfactory and successful process, the only objection to it being that it takes more steam to obtain the same effect than by the ammonia process.

Q. It takes more money?

A. You have to burn more coal.

Q. How many ships is that employed on?

A. Only one in connection with this matter. On the others the ammonia process is used.

Q. Will you briefly describe that?

A. In the ammonia process the refrigeration is effected by pure or what is known as anhydrous ammonia. That is free from water, and not the ordinary ammonia sold at drug stores. It is an exceedingly volatile fluid, which liquefies under a high pressure. The machinery which is used consists of steam engines to operate the machine.

By Governor WOODBURY:

Q. Or electric power?

A. Any source of power. The ammonia compressor which draws in the ammonia gas and compresses it to a high pressure, something like 200 pounds to the square inch, and during that compression the gas becomes hot and is next passed through a series of pipes, either submerged in water or sprinkled with water, and under the influence of the cooling effect of the water it is cooled and liquefies and turns from a gas into liquid, which is colorless, and somewhat less dense than water. It ordinarily goes from there to a receiver or receptacle where the stock, whatever there is kept on hand, is kept, being under a pressure the same as the compressor works at. It next passes from this receiver through small pipes, in liquid form, to the refrigerator, which consists of iron or steel pipes, very strong and tight, at the beginning of which it is allowed to expand through a valve, which is graduated or opened very slightly. The liquid rushes through into these refrigerator pipes, and in those, by reason of the heat that penetrates those pipes from the surrounding air, this liquid ammonia is boiled and becomes gas again, and at the point of expansion through that valve becomes very cold, like expanded air after it is compressed, except the air is not liquefied, so that the difference between this and

the air process is that we get the benefit of latent heat of liquefaction of the ammonia, and by that reason we can do a certain amount of refrigeration with a much less amount of fuel.

By Colonel DENBY:

Q. Does that make it more economical?

A. Yes, sir. Then from those refrigerating pipes this ammonia, which has then become a gas, goes back in close circuit through the machine, and works around and around continually.

By General McCook:

Q. With no loss?

A. Theoretically none, but practically very slight.

By Governor WOODBURY:

Q. Then practically going from a liquid to the gas produces a cold, does it?

A. Yes, sir.

Q. What temperature?

A. Ammonia at atmospheric pressure will boil at about 30° below zero, Fahrenheit. From that on up to close to zero, at 50 pounds above and the atmosphere, this being the ordinary pressure at which the ammonia machines are run.

Q. Is there anything in either process that affects the quality of the beef?

A. It has no effect on the beef, except to keep it cold, in either process.

Q. It does not tend to make it decay or anything of that sort?

A. It has the contrary effect; it tends to keep it.

Q. And thereby preserves it?

A. It prevents decay; I could not call it preserving it.

Q. For some time, at least?

A. Using the word in that sense, it does.

Q. This ammonia process is generally used?

A. It was used there, and is on most of the ships.

Q. In point of fact, how did it work?

A. It worked well.

Q. It kept the meat, did it?

A. Yes, sir.

By General WILSON:

Q. One of the gentlemen who preceded you, representing your company, or who is an agent thereof, spoke of the fact that the meat after having hung for perhaps four weeks would become what is technically or commonly known as ripe, and therefore better and more desired by some people. Now, how long will meat keep in the manner in which you represent it? When a thing becomes ripe, decay usually follows. Now, whether it follows in that case or whether you can maintain it right is what I want to find out.

A. Well, according to my observation, fresh meat, properly refrigerated after slaughtering and kept in a cool temperature, will be at its best edible condition in about three weeks, and will not deteriorate in any quality, or material respect for perhaps ten days longer, or something like that. However, it is proper to say that during that ten days it to some extent loses its quality to keep well if taken out of the refrigerator; in other words, there is a gradual change during that ten days and during any subsequent time it is kept. I do not want to be understood as saying that three weeks plus ten days is the limit it can be kept in a refrigerator. I have known it to be kept much longer, but I do not think it is any better. In fact, it will very gradually deteriorate.

By Colonel DENBY:

Q. Now, you have charge of the cooler in Chicago?

A. I have charge of all the machinery of every character belonging to the company, wherever situated.

Q. You told us about the refrigeration ship; how about the coolers; how were they managed, and the cars?

A. The refrigeration of the meat in the first place, as it passes the inspectors and goes into the chill rooms, is accomplished by means of cold brine, which cools the air which surrounds the meat. That cold brine is used in a chamber, or another story, you might say, over the room in which the meat is hung, so that the warm air, or comparatively warm air, for it is not very warm as it leaves the meat, passes through one side of the ceiling and goes down on the other side, relieved of its moisture, making a constant circulation. The cold brine is maintained at low temperature by means of ammonia pipes, of which I have previously spoken, the ammonia machines on land being exactly like those on ship, except of a much larger capacity. We have in some of our refrigerators both the cold brine and the ice—that is to say, we would have the chamber over the meat chamber proper divided longitudinally by some stanchions or studs set a number of inches apart, and on one side we would use brine, and on the other side naked ice, for the air to pass over also. We do that in one house in Chicago.

Q. In all this process of cooling, keeping, and refrigerating it, do any chemicals enter, except what you have stated about the ammonia?

A. No chemicals whatever at any part of the process or any stage.

Q. Neither at the cooler, about the house, or about the cars or ships, do you use any chemicals except the ammonia—I suppose that is a chemical?

A. Yes, sir; you would call it that, I think. No, sir; there are no other chemicals used. In the chill room at Chicago, I am in there almost daily.

Q. You are there daily?

A. Very frequently; I could hardly say daily.

Q. You would see this apparatus?

A. Yes, sir.

Q. And you would see the beef?

A. Yes, sir.

Q. Did you ever see any beef that would be treated chemically?

A. I never did.

Q. Could it have been treated chemically without coming to your knowledge?

A. It certainly would not.

By General WILSON:

Q. Did you ever hear of any until these recent statements appeared?

A. I have never heard of any such matter outside of the newspapers; and as a matter of fact, I know it is not done.

By Colonel DENBY:

Q. You state no chemical has ever been used?

A. I state that as a positive fact; not only on Government beef, but on other beef, both export and domestic.

Q. You have followed the process from the beef on the hoof to the consumer, have you?

A. I have followed it through and am intimately acquainted with all the steps of it.

Q. Will you state whether at any time any part of that beef, during the process from the hoof to the consumer, ever has been treated chemically?

A. I never knew or heard of any such case outside of the newspapers.

By Governor WOODBURY:

Q. And that is recently, I suppose?

A. I have seen it quite recently, I think within two weeks. About fourteen

years ago, in New York City, when our beef was first introduced there, I think the same accusations were made and refuted; and to-day I think I am safe in saying that three-fourths, if not more, of the beef used in New York is slaughtered in the West exactly as I have described and exactly as the fresh beef furnished the United States Army is treated. Never previous to that, at that time, or subsequently have we ever used any chemicals whatever on the beef or to preserve it, and I have never heard of any of our competitors doing it.

By Colonel DENBY:

Q. You have been in the refrigerating cars personally?

A. Yes, sir.

Q. And you have been in the cooling room?

A. Yes, sir.

Q. Did you or not detect in the cars or in the cooling room any offensive smell?

A. I never did.

Q. Did you detect any odor as if it came from something putrid?

A. I never did.

Q. What odor was there, if any?

A. The odor of fresh beef. Fresh beef has a sort of sweet smell.

Q. Had you anything to do with preparing the cars for the fresh beef?

A. It is a part of my duty to have the cars furnished or built, and I maintain them in good order and personally look after them.

Q. Were they maintained in good order?

A. They are. We have and do take the most perfect care to keep them in good order. We have to keep them in much better order than the ordinary cars.

Q. Do you know personally anything about the beef that went to Santiago or Porto Rico; that is, can you identify any particular lot?

A. I can not. I was in New York at the time those shipments were made, so I didn't see them.

Q. The beef that was shipped from New York, was that shipped in proper refrigerators?

A. You mean the beef shipped for the Army to New York?

Q. Yes, sir.

A. I did not see any of the transshipment at New York.

By Governor WOODBURY:

Q. How low a temperature did you ever know of a refrigerator reaching, where it was operated by the ammonia process, in any room of the refrigerator, either where the meat was or outside of where the meat was?

A. I have seen freezers wherein fresh meat was frozen and kept in a frozen state as low as 4° above zero, and maintained that way by the ammonia process.

Q. How low did you ever see any refrigerating plant where it was simply used to preserve the beef, but not to freeze it?

A. Slightly below 32°, but 32° is about the limit.

Q. Do you maintain a refrigerating plant at Santiago?

A. Yes, sir.

Q. The reason I ask you this question (my associates are smiling) is that the commissary of subsistence testified here that in your plant there, in the room where the apparatus was, the thermometer registered 12° below zero, and I questioned his memory, and I asked you that—do you know whether that could be so there or not?

A. It could not be so in the refrigerating chamber; it might be that a mercury thermometer, having the end screwed into the ammonia pipes, could be 12° below, and it is quite possible he saw that.

Q. Do you have them there?

A. I do not know whether there are or not, but we do have them. It might not be a mercury thermometer in that case. It might show that, and the room be almost any temperature. The two are not necessarily connected; that is to say, the temperature within the refrigerator pipes does not govern that of the room.

Q. How low could it be without freezing the meat in the other room?

A. The boiling point of the ammonia would be independent of the temperature of the room. It might be considerably below; I hardly think it would get as low as 12° below, but it might. If the refrigerating room was as cold as the engineer wanted it, and he was running a refrigerating machine very slowly on that account, his ammonia gas would come back at a very low pressure, consequently the boiling point would be very low, and the indication would be that the temperature in the refrigerating room was as low as he wanted it, but it would not be positive proof.

Q. If meat was hung up in any part of the room, at 12° below, could it be kept and maintained at the proper temperature?

A. Oh, no; that would freeze immediately, and would not be the proper temperature.

By Colonel DENBY:

Q. But didn't you say this temperature might be 12° below, and yet would not register the temperature of the room?

A. That is right.

By Governor WOODBURY:

Q. I am talking about whether a temperature of 12° could be maintained without freezing the meat?

A. No, sir.

By Colonel DENBY:

Q. Have you anything to say that I have not examined you about?

A. Except that with each shipment that went, I furnished a good, experienced refrigerating engineer to run the machines carefully and right.

By Governor WOODBURY:

Q. You mean the ocean shipments?

A. Yes, sir; on the sea.

By Colonel DENBY:

Q. You had men aboard every ship to regulate the refrigerating process?

A. Yes, sir.

Q. They were competent men?

A. Yes, sir.

Q. Where are they now?

A. One is dead and two I have lost track of. The others are still at work.

Q. Do you know where the man is who was on the *Manitoba*?

A. He is working on another ship in Liverpool; he came off from one of our regular ships that we send meat to England on, and when we were through with him, he went to his old work.

Q. Do you have to send a man on every ship on which you send meat?

A. We send one, or more. I will qualify that by saying that we have contracts for carrying fresh meat on the North Atlantic with two lines that furnish their own engineers and assume the responsibility of the refrigeration themselves. That applies to 9 ships out of a total of 26 on which we are regular shippers, and on the other 17 we maintain our own engineers.

WASHINGTON, D. C., *January 9, 1899.***TESTIMONY OF CHARLES E. BARRY.**

Mr. CHARLES E. BARRY, having no objection to being sworn, was thereupon duly sworn by the recorder, and testified as follows:

By Colonel DENBY:

Q. State your name, residence, and occupation.

A. Charles E. Barry; Chicago, Ill.; traveling salesman for Swift & Co.

Q. Where were you, Mr. Barry, and what were you engaged in during the summer—during the war with Spain?

A. In the city of Washington, engaged on contracts given by the Government, in the interest of Swift & Co.

Q. When did you come to Washington?

A. First about April 10; then I went to New York for three weeks and returned, and have been in Washington ever since.

Q. You went to New York in April, did you—about April 12?

A. Yes, sir.

Q. What has been your business here?

A. The Government contract work.

Q. Nothing else?

A. No, sir.

Q. The Government contract work—just explain it, will you?

A. Yes, sir. The Government advertised its bids for its supplies for its camps, and the bids are called in ten days from issue and opened at the commissary by the commissary in charge at the camp, and the awards are made to the lowest bidder present at that time, and it has been my business to follow those bids as advertised.

Q. No matter where the beef was to be delivered?

A. Well, only Washington and Camp Alger have I attended to. Other men have attended to the other places.

Q. You had nothing to do with the beef going to other places?

A. Nothing further than the Cuban and Porto Rican contracts.

Q. You had those?

A. Yes, sir.

Q. What would be the manner and form of attending to those contracts?

A. I don't understand you.

Q. Would you go to the office of the Commissary-General and arrange with him, or how would the Government do—first print an application for so much beef?

A. Yes, sir; they advertise for so many pounds of beef, to be taken during the next thirty days, and so many pounds of bacon.

Q. That is, in the local papers?

A. They issued a circular, and they sent notice to the packers all through the country.

Q. Then you sent in your price?

A. Yes, sir; I referred it to Chicago for the price and it was returned to me. I filled in the contract and proposal and presented the same the morning of the day they were to be opened at the camps or in Washington.

Q. Then it was your business to make out the contracts and sign them?

A. No, sir; they were signed in Chicago and returned to me with the price. The price was not inserted at Chicago, thinking at a later hour it might be changed. The price was given to me by telegraph to be entered.

Q. In that manner and form you personally made or superintended the making of the contracts for beef to be sent to Cuba and Porto Rico?

A. Yes, sir.

Q. Now, can you give us a list of the contracts, the dates, times, and amounts, and quantity of beef sent to Santiago—say, if you please, first—and then to Porto Rico?

A. Yes, sir.

Q. Well, give it to us.

A. The award of the Cuban contract was made to Swift & Co., on the 1st of July. On the 7th of July the first order was given to me by General Eagan for 200,000 pounds. It was loaded on the *Mississippi* transport July 13, at Port Tampa, and sailed from Port Tampa July 16 for Santiago.

Q. You do not know anything about the quality of that beef, of course?

A. No, sir; not personally; I did not see it.

Q. Is the price stated there?

A. Under the Cuban contract it gives the price. It is not stated here. If you would like it, I have the contracts here.

Q. You can state the price.

A. \$9.47 per hundred.

By Governor WOODBURY:

Q. Delivered where?

A. At any point in Cuba.

Q. On shore or in refrigerators?

A. Delivered at Cuba in the refrigerators. Then, on July 12, 300,000 pounds was ordered, loaded on the *Port Victor* July 22, at Port Tampa, and sailed July 23 for Santiago, under the conditions of the Cuban contract. On July 23, 300,000 pounds were ordered, loaded July 27 on the transport *Michigan* at Port Tampa, sailed July 31 to Santiago. July 21, 200,000 pounds ordered, loaded on the *Massachusetts* from Newport News, sailed the 28th for Porto Rico. July 25, 300,000 pounds ordered, loaded August 3 and 4 on the transport *Manitoba* at Newport News, and sailed August 5 for Porto Rico. September 17, 150,000 pounds, loaded September 24 on transport *Michigan* from New York City, sailed September 24 to Santiago. October 31, 100,000 pounds, loaded November 10 on the *Port Victor*, sailed from New York November 11 to Santiago. November 21, 100,000 pounds, loaded December 6 on the *Port Victor* at New York, sailed December 8 for Santiago. December 22, 100,000 pounds, loaded on the 27th on the *Port Victor* at New York, sailed on the 28th for Santiago. December 22, 100,000 pounds ordered, loaded on the 27th, *Port Victor*, at New York, sailed December 28 for Manzanillo, Cuba. December 22, 100,000 pounds ordered, loaded December 27 on the *Port Victor*, sailed December 28 to San Juan, Porto Rico. December 31, 100,000 pounds ordered. That has not been loaded yet; it is ordered for a steamer at Savannah.

Q. Those are all of the orders for beef for Cuba and Porto Rico?

A. Yes, sir.

Q. And that has already been delivered as you state?

A. Yes, sir. You ask me the price in the Cuban contract; the price for Porto Rico was also under the Cuban contract conditions, and the order for San Juan was at \$9.37.

Q. Did you deliver any beef at Camp Alger.

A. No, sir; we were underbid in all the bids for fresh beef at Camp Alger

Q. You did bid for it?

A. Yes, sir.

Q. How about the other camps?

A. Swift & Co. did bid for other camps, but I have no knowledge of the bids or prices. Other men handled that, who were on the ground at the time

Q. As to the details of the business you know nothing, do you?

A. No, sir; nothing as to the practical workings.

Q. Do you know whether any bids for supplying beef for camps in this country were successful?

A. I could not say. I do not know, sir.

By Colonel DENBY:

Q. Is there anything else that you know, that you think would bear upon the question?

A. No, sir.

Q. In the first place, you made this contract (the Cuban)?

A. The Cuban contract first.

Q. Then the Porto Rican?

A. Yes, sir.

Q. Did you have anything to do with the awarding of them?

A. No, sir; they were submitted to me by the Commissary-General, and I sent them to Chicago for approval, and they were returned with the signature attached.

Q. And then it was all furnished as you state?

A. Yes, sir.

WASHINGTON, D. C., *January 9, 1899.*

TESTIMONY OF GUSTAVUS F. SWIFT.

Mr. GUSTAVUS F. SWIFT having no objection to being sworn, was thereupon duly sworn by the recorder, and testified as follows:

By Colonel DENBY:

Q. Will you state your name, your residence, and occupation?

A. Gustavus F. Swift. My age is 59 years last June. I was born in Barnstable County, Mass. I have lived in Chicago twenty-four years this month. I am the senior of Swift & Co., a corporation incorporated in 1885, and have been its president ever since, and am now. The business of the firm is slaughtering cattle, hogs, sheep, and calves, and the disposal of the product thereof.

Q. Do you do any other business except the slaughtering and disposal of product, as you have stated.

A. Excepting matters incidental thereto. I am interested somewhat in the feeding of cattle and shipping, and I am interested in lines of cars which we have established—"Swift Refrigerator Car Company," and several lines of live-stock cars.

Q. As you say, that is incidental to your business.

A. Yes, sir.

Q. Now, Mr. Swift, will you tell us in your own way, without questions from me, how that business is conducted from the beginning to the end, taking the beef on the hoof, and carrying it through until it reaches the consumer. You can use as much detail as you think proper.

A. Swift & Co. is an Illinois corporation, and our general office and headquarters is considered to be at Chicago. We do more business there than at any other place, although we do business at St. Louis, Kansas City, St. Joseph, Omaha, and St. Paul. Our cattle, and other animals as well, are bought in the market. You want to know, I suppose, about the beef question. Chicago is a cattle market six days in the week, but it is very light on Saturday, so it is practically five days in the week a cattle market. We buy our cattle, say, from 9 until 3 o'clock. The business is closed at 3 o'clock. There are no trades made after 3 o'clock, but generally the business is through and the cattle weighed before that time. In the afternoon the cattle are driven to the slaughterhouse and yarded at the slaughterhouse, all of which have watering troughs and water kept in them, and we slaughter the cattle the next day. The yards are immediately back of our slaughterhouse,

and running away to it, and where the cattle are put for slaughtering they are put in stalls.

Q. Before you get to that, I want to understand how you get these cattle—who from?

A. Cattle are brought in by the different railroads. It is a universal custom that whether the cattle are shipped by a feeder or by a shipper, whether shipped by the man that feeds them or the man that bought them from the feeder, he consigns them to some commission firm. That commission firm meets the trader in the morning, and knows from the bills what stock is consigned to him, and he looks after the unloading. The unloading is done by the yard company people, but he sees to it, and knows where the cattle are yarded, or any other live stock, and it is his business to see that they are watered and fed, and he also is to see when the proper time comes to sell them. He shows them to the men who are buyers, and when they are sold he always sees that they are fed and watered before they are sold for the market. The commission man gets his commission from the owner of the cattle, and is expected to sell them the highest he can, and when they go over the scales they go out of his possession. They are yarded in the pens, and they are locked in, but when he wants them weighed he asks the yard company to open the yards, and the man and his help drive them to the scales, and when they have crossed the scales the yard company drives them back. Then they are with the purchaser. The packers, as a rule, have open orders from the consignees for any stock.

Q. You state you buy all of your cattle that way, and not in the country or other places?

A. Practically, yes, sir. Sometimes we will perhaps, if there is a liberal run of cattle in St. Louis, for instance, we might ship ten cars to Chicago, and we might do it from Kansas City, but that is an exception. As to buying cattle in the country, we do not do that. We used to some, but it is our preference to buy cattle in the market, and that is where we supply ourselves, and, as I was saying, they are driven in the afternoon and yarded at the abattoir, where we have good accommodations, and the next day they are killed.

Q. Go on and state what you do with them.

A. The cattle we buy to-day—for instance, Monday—we slaughter Tuesday, and that is the custom throughout the week, except sometimes, with a very liberal run, we might not slaughter all Tuesday that we bought Monday. In that case they would stay with the yard company in the yards and be fed by them, and be slaughtered Tuesday afternoon. As our cattle are handled at the slaughterhouse, they are put in what we call “close pen,” eight of them together, something like this [indicating]. We bring them in and close the gate between them, so there is one steer in each pen, and a man goes on the inside and falls them with a maul.

When the bullock is felled the gate is hoisted by a rope and lever, and as the gate is hoisted, that is, put 18 inches from the floor and is about 3½ inches high, so it raises the gate, and as it tips the bullock rolls out on the slaughterhouse bed. He then puts a chain on his hind legs and he is hoisted clear from the floor. Another man follows and bleeds the bullock. We used to bleed here [indicating the neck], but more recently we bleed lower down toward the breast. It does not cut off the vein, but the blood just falls out, and the bullock is supposed to hang thirty or forty minutes, and when dead his head is taken off and that further bleeds the juglar vein, and the bullock is suspended on this suspension track. He bleeds nicely, much nicer than he would on the floor. Afterwards he is turned up on his back and the different men do their several parts, one perhaps taking off his fore foot and another a hind foot and another opens the bullock down, and another sidelong, and so it is. And afterwards the bullock is sawed open in the breast and in the crotch. By that time he is ready to hoist, and he is hoisted, and then other men take the hide off the legs and rump, and another man takes out

the tail and pulls it out of the hide, and another man saws the rump down between the hips, and then the splitter comes, and he splits the bullock about the middle of his chime, and he goes to another one; and then the bullock is moved over across to give room for others to come in its place, and another man takes the hide off his fore legs and another off his back and another splits the neck; then he is in two halves. Meanwhile the men come forward to—well, I have passed the fact that previous to his moving across the floor and while hoisted up his entrails come out and are cared for. When he is split in half there is one man that will trim the inside and maybe another the outside. We always used to do our washing with cold water, but it has been learned that hot water is much more effectual. We get rid of more blood, and the bullock is more presentable washed with hot water.

Q. One thing you have not given us—what does the Government do with a bullock while still alive, if anything?

A. The Government have men stationed who inspect all cattle while they come to the scales, and keep a record of all cattle as they come, see their weight and see that they are good and healthy cattle. I believe they are under the control of a physician in that line, and I think they have the aid of the stock-yard companies wherever they are.

Q. Who is this Government inspector, and what is his occupation?

A. The chief Government inspector at Chicago is Dr. Devoe. He is an appointee, as I understand it, of the Secretary of Agriculture.

Q. Is he a veterinary?

A. I think so.

Q. Do you know where he graduated?

A. I do not.

Q. You do not have anything to do with him, or his appointment or pay?

A. No; not in that sense.

Q. Where does he stand? At the scale?

A. Yes, sir; his deputies are at all the cattle scales.

Q. What is his business?

A. To stand there and see which shall pass and which shall be rejected.

Q. If they find any steer not in good health, what will they do with it?

A. As I understand it, order him to a yard, and it is once a week that all condemned cattle are slaughtered at a certain slaughterhouse and a post-mortem passed on them there, and such as do not pass the post-mortem examination are tanked there, and such as do pass it are allowed to be sold and used for meat.

Q. When you say "tanked," what do you mean by that?

A. Well, that is the agency we use to get rid of all refuse.

Q. What is done with that?

A. I suppose it is lubricating grease, or possibly soap grease; I do not know. As I understand, the veterinary physicians do not allow any part of the condemned beef to go into edible food.

Q. Do you mean fertilizer?

A. I want to be careful just here, if you please. This slaughterhouse is not a slaughterhouse in the stock-yard district; that is, within the corporation of the stock yards, nor is it on the premises of any packer. It is a slaughterhouse that is run under the supervision of the Live-Stock Exchange, and they represent the owner of the cattle, while the doctor represents the Government in that matter.

By Governor WOODBURY:

Q. And the packers have no interest in that establishment?

A. Not in any way at all. If the bullock is condemned there is a revenue there, which he turns over to its owner. Of course; if the bullock passes the inspection the revenue is larger, but the Exchange represents that matter through its board

of directors or secretary. And I might say that we had no end of trouble in getting along previous to the establishment of the United States live-stock inspection, but it has given the product very great character. We are not now annoyed as we were with State legislation, though there is more or less State legislation now that is antagonistic to meats not killed in the State. They have a law recently in Georgia enforcing certain inspection on all meats not killed within the State, and large inspection fees, which really means the prohibition of the business according to that law. It is not thought that law will stand.

By Dr. CONNER:

Q. You simply mean that the refuse carcasses are put into large tanks and steamed?

A. Yes, sir; and the grease from it is gathered as grease, and the substance as fertilizer. As for the bone, there is no bone; it is dissolved by the steam. I think I have given a pretty full explanation of the cattle business. I might say that any cattle that we export have a little further and, I think, more rigid inspection than the other cattle on the scale, and the Government inspector puts in their ear a certain metal tag for such cattle as we export alive. Now, if I am permitted, I will say, in regard to the post-mortem inspection—

By Captain HOWELL:

Q. Before you come to that I want to ask you a question. Now, you buy these beeves from the commission merchant?

A. Yes, sir.

Q. Now, you get a number of beeves—a thousand, say—and say 25 are rejected by the Government inspector. Do you have to pay for those 25 beeves?

A. Not at all.

Q. They are sent back?

A. We only pay for what passes inspection. The trades for all cattle and hogs are made subject to Government inspection, and I might say further that the Government, State, and city are all in unison. There was a time when there was a little friction, but they have done away with that, and they all work in one line, and also the live-stock association and the stock-yard management.

By Dr. CONNER:

Q. Who pays the inspection fees?

A. Uncle Samuel, as I understand it.

By Captain HOWELL:

Q. The packers have nothing to do with the compensation of these officers?

A. None whatever.

Q. Do you find them competent men?

A. I believe they are.

Q. They understand their business?

A. I think so.

Q. They don't hesitate to reject any?

A. No, sir.

Q. They are independent and not on your ground?

A. Yes, sir. In my slaughterhouse I am boss. I have no understanding with them, I might say. I have been in the meat business, continually, more than forty-two years. When I did a local business in Massachusetts, and was waited upon by the local board of health, which was composed of the selectmen of the town, because some of the neighbors had complained, I says, "Unfortunately for me, I am a butcher, doing the best I know how. If you can give me any suggestion, I shall be much obliged to you." I did not tell them they had no business on my premises. Before I lived in Chicago, the State of Illinois appointed, under

the Humane Society, an inspector at the yards to see that cattle were watered, as they should be, soon after they arrived in the yards. It was somewhat of a custom for cattle arriving Sunday not to be watered until Monday. Well, it really needed some one to look after it, and the State of Illinois appointed an agent there, and I know that they had some contention with several commission firms, and I was subpoenaed one time as a witness, even before I lived there, when there as a transient. I was asked in my opinion when cattle should be watered, and I said, when they wish it. It finally got around that everybody was that way. I think there is no nuisance of that kind in the market now. The object of course of giving them drink Sunday would be for them to weigh more Monday. Shall I go on with a description of the bullock?

By Colonel DENBY:

Q. Yes, sir.

A. The bullock, when washed and dried with cloths and otherwise, is run into a cooling room, and still he is followed by a man with a bucket of water and a cloth, so if any of the veins start, and they are always liable to, he will be able to stop that. Now I have passed the post-mortem examination. At Swift & Co.'s, Chicago, we slaughter cattle in two slaughterhouses. Dr. Devoe has a veterinary surgeon whose duty it is to spend his whole time on our premises when cattle are being slaughtered, and this veterinary has two assistants, so there is one in each of the two slaughterhouses, and between those three men the inspection or post-mortem examination of cattle is made while the cattle are being dressed, and of course the special part of the time is previous to or while the entrails are being removed, and that is when the inspection is being done, and if there is any question, the Government man says, "Set that steer out," or "Send it to the tank," just as he sees fit, and his order is executed.

Q. That is, to your own tank?

A. Yes, sir, to our offal tank; and it is done under his supervision.

By Captain HOWELL:

Q. Now, who loses that beef?

A. The owner, Swift & Co.

Q. That comes out of you?

A. Certainly.

Q. If any beef is condemned by the Government inspector, after it is slaughtered, by the post-mortem examination, it is your loss?

A. Yes, sir.

Q. On the hoof it is the commission man's loss?

A. Yes, sir. When the commission men get those cattle across the scales, with the Government agent's approval, the collection of his ticket is through.

Q. Now, you send it to your tank?

A. Yes, sir.

Q. What do you do with it in that tank?

A. The fat of it is saved for the grease, and there is lots of use made of grease, lubricating, etc., and the refuse is—

Q. That don't go into canned beef?

A. We don't make that.

Q. It all goes right into that tank?

A. Yes, sir. They are run into the cooler from the beds. Probably when we start in the morning, that cooler will not be over 40, and we like the temperature to be about 45. It soon gets up there, and about 40 per cent of this cooler, what we call the back cooler, gives us tracks and loading place on the front, and we run the cattle in here [indicating] first, and they soon run the temperature up, so we maintain somewhere from 40° to 45°, and then they are run through in here

[indicating], and by that time the steam doesn't raise it much, and they stay in here two nights with the temperature gradually reduced, and we expect when we load out the second day after killing to have the temperature about 35 to 37 or 38—anywhere along there is good enough—and they will be so thoroughly cooled at that time that where we divide the side, between the ribs, it cuts square, and as the saying is, "the beef is set"—that is, it holds its shape, it does not slide from the rib. It is our rule for it to stay in the cooler forty-eight hours—that is, two nights—and then it is put in the car and sent to its destination.

By Colonel DENBY:

Q. You have said nothing about stamping or tagging; tell us when that takes place.

A. We are shippers of beef to Liverpool and London; our space on shipboard is contracted for on regular lines, most of which sail regular days in the week; and, further than that, we are under contract with the shipping companies that they will give us seven days' notice of the sailing of a boat. That gives us time to buy beef specially for that purpose. We buy cattle specially for our export beef. They are marked "export." They come to the slaughterhouse and they are killed "export." And on those the Government officer puts his Government tag on each quarter of a steer, and it used to be on each quarter for all, but it seemed to be too much of a burden, and they have discontinued, except for our export trade, and on those killed not for export they use a stamp of indelible ink, with, I think, two letters, "U. S.," and I don't know what the character is between them, whether the number of the abattoir or not, but it is the stamp that is not as big as this [indicating top of an ink well] that goes on the several quarters of every carcass.

Q. That goes on all the domestic beef?

A. Yes, sir; unless it is a creature that the veterinarian says, "send it out," or "send to the tank;" then the carcass is not used.

Q. After all that is done, what is done with the beef, as to putting it on the cars, and all that?

A. Why, we ship it to our various branch houses; it is loaded in refrigerator cars.

Q. About how much business does Swift & Co. do; that is, the number of beeves slaughtered in a year?

A. I ought to have that with me, but I have not got it here. It is a million and three or four hundred thousand head of cattle. I will furnish that information to the commission exactly.

Q. About how many do you send abroad?

A. I have that information here, thinking it would be asked, and I wanted to be in a position to give it, so I asked for it, and I have this telegram: "G. F. Swift, Arlington Hotel, Washington, D. C.—Swift & Co. exported year 1898 108,991 carcasses of dressed beef; weight, 95,996,830 pounds; value, \$6,865,144.44 (signed) D. E. Hartwell." That is our secretary. This says, exported. In my own mind I am sure this means cattle for export, and cattle we shipped to Cuba we do not count in that sense of export. Perhaps, also, you would like to know the reason why. We have never had for cattle shipped to Cuba or Santiago sufficient notice so that we could kill cattle for that purpose, and when we have had notice we have had to select a shipment from cattle on hand, and of course they would not be tagged as "export," they not being killed for export.

Q. You mean you have killed more cattle than you have exported, do you?

A. I mean that it is not included, the cattle that we have shipped on Government contract to Cuba or Santiago. That really means Liverpool and London. Those are the only two ports we do export to.

Q. How many have you killed for domestic consumption?

A. In round figures, one million and a quarter; but, as I say, I will furnish that exactly.

Q. Is there any difference in the quality of the meat that you send to Europe and that retained for home consumption, which furnished the material for that sent to Cuba and Porto Rico, as I understand it?

A. For export beef it would not be all the same weight. It would be uniformly all good quality, but we would put a different mark on it. For instance, our good grade of beef is marked "A," and that means a good quality of cattle that will dress 750 to 850, and "AA" would be a good class of cattle, of good quality, still heavier. "C" and "D" are lighter. Now, you might ask me about our home trade. Of course we buy cattle and we have a place for them; cattle that weigh 800 alive and cattle that weigh 1,600 to 1,700 alive, and if we have the heavier class of cattle, although we do not kill but a few of that weight, we have a cattle that go to Boston, not in a large proportion, but the other cattle that go to Boston would be fairly good weight. If we should ship them to this city there would be no use for them. Now, this city wants good quality, tidy, light-weight beef, and Baltimore the same, and Philadelphia to quite an extent.

Q. As respects the beef sent to Cuba and Porto Rico, did it grade A, B, C, or what?

A. It would just about grade "A" and "C;" those were the two grades. We were restricted in our weights. I do not know as regards the heavier beef, but we knew it was not wanted, and, in fact, we made it a rule not to do it, but it would grade in those two grades. A great deal of our "C" grade has cost more than the "A," and our "AA" has cost at all times considerably less than either.

Q. At what cities was the beef you furnished to Porto Rico and Cuba like—Baltimore, Washington, or Boston?

A. More like New York.

Q. Was it as good quality as beef supplied to New York City?

A. I believe it was. We felt very much complimented to be awarded the contract by the Government for the troops in time of war, and we made it a point to see how good we could give them.

Q. Was it as good as that sent to this city?

A. The beef sent to this city would not fill the requirements.

Q. Then better beef or as good as was furnished to the city of Washington was furnished to the Government, is that it?

A. We can not get it too good for Washington. If we wanted yearlings, they would cost more at times than the heavier beef. I want to give an intelligent answer and still a correct answer. Washington wants as fine a quality of beef as any city. There is no city that wants as fine, but still they want only light and medium weights, and with the Government the weight would be all medium.

Q. Now, do I understand that the meat furnished by you and sent to Cuba and Porto Rico was equal in quality to that sent to Washington, and a little heavier?

A. I think that is the correct answer.

By Colonel DENBY:

Q. Mr. Swift, isn't it stated in your contract here, "The fresh beef to be furnished by the party of the second part under this contract shall be uniformly of good quality, from fat steers, United States Government inspected, weighing not less than 600 pounds dressed weight per carcass, and shall be refrigerated, chilled, or frozen in quantities according as it shall be called for by the Commissary-General of Subsistence, United States Army. It is to be from the fore and hind quarters proportionately, including all the best cuts thereof; necks cut off at the fourth vertebral joint, and breasts trimmed down; shanks of forequarters cut off 4 inches above the kneejoint, and of the hindquarters 8 inches above the hock joint," etc. It is scarcely necessary to read it; the question is whether you complied with this contract made with the Government?

A. I say, I believe we did. I want to say that the description there excludes oxen; you see it says steer beef.

By Captain HOWELL:

Q. Is there any difference?

A. Yes, sir; we could afford to make a difference if we had the right to put in oxen.

Q. What is the difference between a steer and oxen?

A. Why, a larger frame, and more bone proportionately, and less meat.

By Governor WOODBURY:

Q. Have the oxen been worked?

A. Most assuredly, they would not be oxen otherwise.

Q. The steer has not been worked, and the ox has?

A. Yes, sir.

Q. You can not furnish them to the Government?

A. No, sir; they are excluded.

By Colonel DENBY:

Q. Now, in regard to this contract, in complying with it, what did you do with this beef furnished to the Government besides what you have said?

A. I don't know whether it is a requirement there in the contract—I think it is—that the beef should be clothed. With our domestic beef we weigh the two sides together and save, as a record, the weight of the steer, and give him a number, and he goes by that weight and number; but with the export beef we weigh it in the quarter and put a sack on each quarter—a sack made of light cloth—you might call it cheese cloth. The object in doing it is twofold—one, it prevents chafing in the car, and another, in transferring from the car to shipboard where we have to use help under the stevedore it saves it from being soiled or dirtied.

Q. I want to know whether you have given us the whole process of preparing this beef?

A. Yes, sir; most assuredly.

Q. Do you, or not, use any chemicals?

A. I wish to say, decidedly, no; and I wish to say further than that, being a butcher more than forty years, and I consider myself in every way competent to judge, I don't know of the use of chemicals with beef.

Q. Did you ever use any with beef?

A. I never did. And although there are cranks that will say that, and I don't know but that they believe it, that they think they can inject some fluid into a live animal that will preserve it after death. Now, it is like this, the quality of the beef is made by the feeder. After the bullock comes from the feeder, do what you will, he deteriorates, and that is the merit of slaughtering beef near the feed lot. If the beef hasn't the quality and flavor of beef, there is nothing you can do for it that will bring it up. The decay of beef is from destroying the life, and I am told by scientific people it commences immediately when life is extinct.

The object in dressing the bullock is to relieve it of all blood possible, and the next thing is to relieve it of the animal heat, which we do by cooling the temperature, and the beef once safe that way will outlast a fresh-killed beef a number of times. It is not from without that the beef becomes putrid and unsavory; it is from within. And once properly relieved of the animal heat, it will stand a great deal of wear after that. I would like to say of our way of handling beef in Europe, it goes there in refrigerators on shipboard, and it is taken out of shipboard on the afternoon and loaded, as a general rule, in cars not refrigerated, and goes on to London, and is on the market the next day, and very often it is held over and sold the second day; and we hear no complaint. The temperature is not always as desirable as might be there; at times it is quite sultry, and at times, in

their way of handling beef it is not possible to have sweet beef. The rumps, etc., are not sweet, and at these times the trade for refrigerated beef is very much stimulated. I might say we are the exporters of refrigerated beef, but only one of six—Morris & Co., Armour & Co., Hammond & Co., Chicago; Eastman & Co., New York; Schwartzchild & Sultzburger, New York; and Swift & Co.

By Colonel DENBY:

Q. Do you know how much their combined business amounts to?

A. No, sir.

By Captain HOWELL:

Q. You didn't mention Cudahy.

A. He is not an exporter. I think perhaps Swift & Co. do 30 per cent of the business.

Q. How many million dollars do you export?

A. Six million.

Q. That makes about \$20,000,000 of fresh beef?

A. Yes, sir.

By Colonel DENBY:

Q. Have you ever seen any beef treated chemically for sale on the market?

A. No, sir; I never have. We have once or twice furnished a piece of beef for somebody to treat, but I never knew a piece of meat to keep sweet. Swift & Co. was incorporated in 1885, and I am the senior member of the company. Previous to that it was G. F. Swift. I never myself used any chemicals on any meat; neither has Swift & Co. I am sure. I speak advisedly. I know that it has in one or two cases furnished a piece of meat for men to experiment on, and I never knew of but one result.

Q. Does your beef undergo any change by time; if so, what, and what is the effect of it?

A. Yes, sir; beef undergoes some change in time.

Q. I will direct my question to the whiskers, beard, or mold which appears on the beef.

A. It is only a question of how long a time, if the beef is kept in a temperature above freezing—it is only a question of how long a time before there would be a growth on the beef, and the question of the length or shortness of time is how far you deviate from the point of freezing. The further you get from freezing the sooner the growth will develop.

By Dr. CONNER:

Q. What is the character of this mold?

A. Well, you might almost call it mildew, and of course when there is a place as big as that [indicating] that you can move with your finger, you would have a rough on your finger.

Q. Does it grow out from the surface or from underneath?

A. Out from the surface.

Q. If that beef is kept within a temperature of 33 to 42, will that meat indicate decomposition because of the presence of this mold? In other words, is this mold because of decomposition or a product of decomposition, or otherwise?

A. I don't think that I could say it was not.

Q. Will meat decompose at the temperature indicated provided that temperature is maintained?

A. I do not know exactly how to answer that question. Of course, time tells on everything. It tells on beef and it tells on fruit. The fruit man will gather his pears and place them away to ripen, and when the pear is at its best, I do not know whether we would say it was on a line of decomposition. I do not know but what we would say it was not a little past sound.

Q. If your meat was kept within a few degrees of freezing, will that beef indicate other change than the mold you speak of, plus the drying up to some extent?

A. Well, I should say, no. Beef develops a quality that mold goes with, and I believe beef is more nutritious, more wholesome then, so long as it retains its good taste. There is one thing about it, if beef is properly cooled, if there is any spoiling afterwards, it is outside, not inside, while without refrigeration the spoiling comes from within.

Q. Why is it that the spoiling occurs from the outside when refrigeration has not been accomplished?

A. From the heat necessarily connected with the animal.

Q. Is there, or is there not, a greater accumulation of blood within the immediate vicinity of bone, as within the marrow of bone, as compared with the fleshy parts outside?

A. Of course, there are some arteries that run pretty well within the meat. I am at a loss to know where the surgeon will define between the artery and the vein. As I am told the artery drives out the blood and the vein brings it back. Is that it?

Q. Yes, sir; that is right. The artery drives it out and the vein brings it back.

A. Those little veins, when the hide is taken from the bullock, they all emit some blood, and except from the water and the care, the quarters would be un-presentable.

By Captain HOWELL:

Q. Is it a fact that beef that has had the animal heat taken out of it and cured by the manner that you use commences to decompose from the outside and goes in?

A. When it does at all, decidedly.

Q. And now, if you kill a beef—you have been in the business a long time—and the animal heat is left in it, it commences to decompose around the bone?

A. Decidedly.

Q. On the other hand, it is just the opposite?

A. Yes, sir; yes, sir; and the most intricate place is in the thick of the bone, near the rump.

Q. Do you mean it will commence to spoil there quicker than anywhere else?

A. Yes, sir; in butchering without refrigeration in the old days when the balance of the bullock would be edible the next day after or perhaps the second day, there would be a place nearest the bone in the rump that would not be.

By Dr. CONNER:

Q. Isn't it a fact that you leave the kidney fat in place?

A. Yes, sir.

Q. Why not remove that?

A. Dollars and cents.

Q. Would it not affect the keeping qualities if not left in position?

A. No, sir; that is not a fact.

Q. Your refrigerator prevents that?

A. Yes, sir.

Q. So you can safely leave the kidney fat in position?

A. Yes, sir. In London, and I guess generally all over England, they remove the kidneys, not the fat.

Q. Do you remove the kidneys or leave them?

A. We leave them; it is a part of the bullock.

By Governor WOODBURY:

Q. What length of time will your beef keep and be edible by your refrigerating process—you speak of exporting?

A. Well, we can get at the minimum. It is two days at the slaughterhouse, four days to the seaboard, and they want to load it not on the evening of sailing, but one day sooner than that, and they average ten days for the passage, and we

have the privilege of keeping the beef on board as long as the ship remains in port—generally ten days—but we do that as a convenience. It is oftentimes on board a week; that is twenty-five days; then it is shipped to London.

Q. How long is it kept after that by the butchers?

A. Well, at times they have it on hand two or three weeks.

By Dr. CONNER:

Q. Keeping it refrigerated, of course?

A. Yes, sir. The most severe test I have ever known for beef was when we refrigerated on shipboard with natural ice. Mr. Murphy, I suppose, explained it. Well, we used natural ice, and we have to pay for the space we use on shipboard, whether it is beef or ice or what; and we were shippers on the Allan Line, and it was as much as fifteen years ago—more, I guess. By the way, the average passage would be about twelve days, and of course we used to put in ice enough for a little spare; and one of the Allan Line ships broke its shaft in mid-ocean and proceeded under sail; and when she arrived, the report on the beef was “fair condition.” It was all sold in Liverpool and London. The ship’s destination was Liverpool, and it was all sold in Liverpool and London, and it made G. F. Swift & Co. money. The beef was sold forty-three days killed, which was more than thirty days on the water with ice only calculated for half of that time.

By Captain HOWELL:

Q. You never lost anything by it?

A. As I say, the report on the shipment was “beef in fair condition.” As soon as they landed they got more ice and put on board and filled the ice bunkers. It sold and sold at a price that made a profit, and it was forty-three days old when sold.

By Colonel DENBY:

Q. This mold that appears on beef, does it make it more nutritious?

A. Certainly not as far as the mold goes. It certainly can not help it; but meanwhile the age of the beef with the juice in it acts to absorb the tissue, and it becomes palatable and easily masticated and, I suppose, easily digested.

Q. Do you cut that off or leave it on?

A. The only question I have with it would be sometimes in case of strikes, or something of that kind, perhaps a car of beef would be sidetracked. I know in the strike of 1894 I happened to be in Boston on the 17th of July, and a car of beef came there that was loaded the last day of June, and it had been eighteen days in transit, and meanwhile was set out, and had not always had the care that it should have, and there was this growth on it, and I asked a man at the commission house what he was going to do with it, and he said, “Wipe it up and sell it,” and while I was standing there I saw a young man standing there with a butcher’s frock on and a skewer. I went about my business and happened back, and they were not moving the beef to my liking, and I happened to pass it three times, but they had not moved it, and I got out of patience and said what I wanted to to them, and I said to this young man, “You act as if you were looking for stinking beef. Now,” I said, “you can not find it here.” I said, “This beef was in a thoroughly preserved condition before it left our abattoir in Chicago. It has had a long passage and looks a little bad on the outside, but if you are looking for stinking beef, you can not find it here.” He got what in part belonged to the salesman, because I was kind of worked up, but I expressed the fact and knew that that beef, except for the little growth that we are speaking of, was all right.

By Captain HOWELL:

Q. Did it turn out to be so?

A. Yes, sir.

By Colonel DENBY:

Q. Have you in any of your cars, coolers, or refrigerators ever noticed any odor coming from the beef?

A. Take a rack of livers—we put them on racks, and we generally ship as many livers with a car as there are quarters of beef, and we put them on racks and slip them under the quarters of beef. If perchance a rack with half a dozen livers slaughtered with the beef that day were slipped into the car there would be some bad results from it, and possibly it would stimulate the growth we spoke of, if in hot weather, and the car would smell bad; but I have never known anything of a bad smell of beef that was at all attributable to the beef.

Q. You sell beef to all of the principal towns, don't you?

A. Yes, sir.

Q. Have you ever had any complaints?

A. I am not in a condition to say that we never have complaints. Now, I do not know that we have had any complaints this last summer of what is called "pricked" beef; that would be felt hard just a little around the bone. That would be settled for so he could afford not to use that piece around the bone: but those are isolated occasions.

Q. They are rare?

A. Yes, sir; whereas without refrigeration the majority of it would be there, while now we hear of it two or three times in a year.

By Captain HOWELL:

Q. What is the difference between icing as you used to and the modern method of ammonia?

A. We use it at our packing houses; but we use now, for economy of room on shipboard, ammonia.

Q. The process now on shipboard of cooling the room where the beef is, is the same as this same process that we make ice of ammonia, isn't it?

A. That we make cold air with; we cool the temperature with ammonia.

Q. Is that process as good as the natural ice?

A. It is when beef has once been relieved of the animal heat; before that, I would say no. We still use natural ice in the bed.

Q. At your abattoir?

A. Yes, sir; we can not counteract the use of ice with a heavy day's killing.

Q. Is there any difference between the beef furnished to the Army and to New York?

A. So far as I know, no, sir.

Q. Is it the same kind of beef?

A. Yes, sir.

Q. Carried in the same kind of vessels?

A. Yes, sir.

Q. Do you supply any to the Navy?

A. I guess so far as we know, no; but I guess they have both used some. I think that contract is for the Army.

By Colonel DENBY:

Q. Does anybody supply this refrigerated beef to the Navy?

A. They have taken some from New York. They have taken some frozen beef from New York.

By Captain HOWELL:

Q. You have furnished it to them, haven't you?

A. I don't know that we have not. I guess probably we have, but I can not speak of that.

Q. You furnished all the beef that went to the army at Porto Rico and Cuba?

A. I believe we did.

Q. Now, I want to know from you if the statement made that this beef was embalmed or had chemicals injected into it is true.

A. That is not true, and those that say that must be misinformed, most assuredly.

By Dr. CONNER:

Q. You spoke of frozen beef in comparison with refrigerated beef; is there any difference?

A. Oh, decidedly.

Q. In what respect, please?

A. You know the effect of cabbage to be frozen. You have the hull afterwards, but the nutriment isn't there. Now, with beef frozen you have the hull there, the juice will get away if you let it, and if you save it it is not the same. The freezing produces some chemical change I can not describe to you, and I will say, in fairness all around, that it don't seem to have the same effect with mutton that it does with beef. Now, for the supplies for the English army we put in bids previous to last year, so we supplied them last year with, I suppose, more than 75 per cent. Certain parts of the year it was to be refrigerated, and certain other parts of the year it was to be "town killed," or killed in Great Britain. They wanted more than their proportion of refrigerated beef. They were well pleased with it, and they took great interest to learn the facts, and they were much surprised to know that they had been buying for years by contract partly refrigerated beef, and had been accepting and using Australian frozen beef. The English army indicated that they never would be so imposed on again. We did not have the large majority of the contract this year, because the home people that we cut out last year came in. But we got a good liberal share, but not the majority, and it has been a great letter of instruction to the English army, and it has made a great reputation for American beef.

By Captain HOWELL:

Q. Do you furnish any other government?

A. The English Government.

Q. Any other?

A. No, sir. I might say that our distributing sales, both local and foreign, exceeded \$150,000,000 in 1898 and more than \$122,000,000 in 1897, and we consider the national inspection or Government inspection of live stock a very great benefit to the agricultural interest.

WASHINGTON, D. C., *January 10, 1899.*

TESTIMONY OF LIEUT. COL. HUGH J. GALLAGHER—Recalled.

Lieut. Col. HUGH J. GALLAGHER, recalled for further examination:

By Colonel DENBY:

Q. Were you stationed in Santiago?

A. Yes, sir.

Q. When did you get there?

A. I was—the first day, about the 20th of July. On the 25th of July I was appointed depot commissary at Santiago, and continued—

Q. On the 21st of July—

A. About that time.

Q. How many troops were there then?

A. In the city?

Q. Yes.

A. I believe one regiment, the Ninth Infantry.

By General McCook:

Q. Do you mean the number of troops being supplied?

A. The entire army of 15,000 or 16,000 were being supplied from Santiago.

By Colonel DENBY:

Q. And whose business was it to supply them?

A. It was my business, as depot commissary, from the time I was appointed until I left.

Q. How long did you remain there?

A. From the 25th of July until the 25th of August. A few days before I left I was relieved as depot commissary by Colonel Osgood, and during those few days he was responsible for the issue.

Q. During that time all the supplies of every character passed through your hands?

A. Yes, sir.

Q. Now, we want to inquire particularly about the beef deliveries—all about it.

A. We had the refrigerated beef.

Q. Where was the refrigerator?

A. It arrived in the transports which were provided with cold-storage room. The beef was taken from the boats, brought to the wharf, and at the wharf issued to the troops.

Q. Without being sent to another refrigerator?

A. No, sir.

Q. Do you mean all the beef was issued in that way?

A. All while I was there.

Q. Taken directly from the ship and immediately issued to the troops?

A. Yes, sir. The ships could not come to the wharf. A lighter would be sent out to the ships about 2 o'clock in the morning, and it would bring the beef to a wharf, where it was put under a shed, and there it would be issued.

Q. How many pounds did you issue of the slaughtered refrigerated beef?

A. During the time I was commissary—during the time I was responsible—I would like to explain the difference. Between July 25 and the end of July I was issuing for Major Wilson, the responsible officer, who had been obliged to leave on account of sickness. Therefore what was issued between those dates would appear on his papers and mine from the 1st of August until I quit issuing, and I issued in the neighborhood of 380,000 pounds fresh beef.

Q. Refrigerated beef?

A. Yes, sir; refrigerated beef.

Q. Did you issue any beef on the hoof?

A. No, sir.

Q. Did you issue any tinned beef?

A. Yes, sir.

Q. What was the process, if any, as to the inspection of that beef when taken from the refrigerator and brought to the shore?

A. A commissary-sergeant went with the boat in the morning—

Q. To the ship?

A. To the ship. [Continuing former answer.] He stayed with the beef until it came ashore, and when the issuing was going on there was an officer present all the time—my assistant, Lieutenant Johnson, of the Seventeenth Infantry. I also inspected it every day once or twice, sometimes more.

Q. When you say you inspected it, you mean "inspection," not merely looking at it?

A. I carefully inspected it.

Q. What did this other officer do?

A. He was there keeping an account of it, within a few feet of where it was issued.

Q. What was the sergeant doing?

A. He was assisting this officer.

Q. Tell us what the condition and quality of that beef was.

A. I considered the condition and quality of that beef very good.

Q. Did you discover any pieces that were putrid or decayed?

A. No, sir; I did not.

Q. If there had been any there of that character, would you have discovered them?

A. Well, my attention would undoubtedly have been called to it. There was some beef condemned by boards of survey after it had reached the camps. I can recollect no beef rejected there on the wharf. When it came to the wharf ready for issue it was issued and accepted.

Q. Tell us about the beef that was condemned after it got to the camps.

A. Boards of survey condemned in the neighborhood of three or four thousand—4,200—pounds; condemned by boards of survey.

Q. Held where?

A. In camp; after the beef reached camp.

Q. Outside Santiago?

A. Yes, sir.

Q. Do you know for what reason it was condemned?

A. On account of being decomposed. Well, beginning, they said "decomposed."

Q. Do you know when that decomposition set in?

A. That I could not say, sir. It was condemned after it reached camp. I suppose when it reached the air.

Q. Explain to us the process of delivery. You have it on shore with these two gentlemen there. What was done with it then?

A. The beef was taken in wagons to the camps and there distributed.

Q. How far?

A. From 2 miles to 5 or 6 miles, and sometimes farther.

Q. What was the character of the temperature?

A. Of the beef?

Q. No; the air.

A. It was very hot at that time.

Q. Was that the hottest season?

A. Yes, sir; the hottest season of the year.

Q. Are you perfectly sure no beef passed you or your inspection that was decomposed or bad?

A. I certainly never allowed any beef to be issued to men that I thought was bad. I never accepted any but good beef that I know of.

Q. What did you do in regard to replacing, if anything, this beef that was condemned?

A. Issued in lieu of it.

Q. What was done with the condemned beef?

A. Buried or destroyed in some way; that is the reports of boards of survey, which were approved in most cases, and the disposition of the beef was made as recommended by the boards.

Q. Well, was the beef liable to be spoiled from the time you delivered it to the wagon and before it could be used in the camp?

A. In that hot climate I think it was liable to; yes, sir; at times, and it depends, too, upon how soon it was used.

Q. Was your attention ever called to the question of whether any chemicals were used on that beef, or any you knew of?

A. No, sir.

Q. Had any been used?

A. I knew of none having been used. There was nothing about the beef to indicate anything of that kind. It is the same kind I am issuing now to troops.

Q. Where?

A. Augusta, Ga. It is apparently the same, only the beef received in Santiago was apparently heavier.

Q. Are you issuing it in Cuba now?

A. I don't know; I presume it is.

Q. Do you send it to Manila?

A. I presume so, although I am not familiar with the methods of supplying troops there; but I have a depot at Augusta, where there are in the neighborhood of 20,000 men being supplied with the beef. It comes in cars and is delivered to the troops.

Q. What is your opinion as to whether that beef should be issued to the troops—is it fit to be?

A. This refrigerated beef?

Q. Yes.

A. I most decidedly say it should be. It is the same beef as is used all over the United States—all over the country.

By Governor WOODBURY:

Q. While you were receiving and issuing beef, Colonel, did you receive any intimation or hear any rumors that this beef had been chemically prepared, so as to preserve it from decay, or anything of that kind?

A. No, sir; I can recall none at all. I remember—whether it was afterwards or before—I mean whether it was after I returned to the United States or while in Cuba—I saw a newspaper in which it had been stated that a contract had been let to furnish beef to the troops in Cuba and other places that made provision it would be good for seventy-two hours after issuing.

Q. Was there anything in that article to say that the beef had been chemically treated?

A. No, sir; that is the only thing I can recall.

By Colonel DENBY:

Q. If there is any member of the board who desires to ask anything about the refrigerated beef, this is a good time. As there are no questions, then I will take up the tinned beef. Have you told us, then, all you know about refrigerated beef?

A. I think I have, sir.

Q. If you know of anything else, I think it would be of advantage to state it.

A. I have nothing special to say, only that this refrigerated beef—I think that the troops in the interior, where you can not reach them immediately with the refrigerated beef, to them you should supply beef on the hoof; but where a boat can go to a wharf and issue it to the troops, it should be done. It is a more convenient way of handling and just as good. It will avoid the necessity of killing and driving and handling and caring for them. But in the interior refrigerated beef nor any beef will keep long in such a hot climate.

Q. Do the men like this refrigerated beef?

A. Yes, sir.

Q. Make no complaints of it?

A. Oh, there are complaints and have been as long as I have been in the Army; men will growl. I have heard complaints, but it is not because of the refrigerated beef; it would be the same out West, right where the slaughterhouses are.

Q. But generally they receive it and use it without objection?

A. Yes, sir; unless they complained that the piece was tough or light weight or something of that kind, but not because it is refrigerated beef.

Q. Now, as regards tinned beef; did you have any of that in store?

A. Yes, sir.

Q. How much?

A. We had very large quantities of it. I could tell if I had my returns here.

Q. Did you issue it?

A. Yes, sir.

Q. Did you issue it habitually as part of the rations?

A. It was issued from the time—when we landed at Siboney we had a good deal of it on shore. It was issued to the troops at first; then they became tired of it and we got bacon and issued that to them. The troops preferred the bacon. The tinned beef they did not like.

Q. Why not?

A. I presume they had become tired of it. They had been on the ocean several days eating canned corned beef as part of the travel ration.

Q. You know of no objections to the corned beef?

A. I never heard any.

Q. What was the objection to the tinned beef?

A. It was not palatable.

Q. Have you ever eaten it yourself?

A. Yes, sir; I have.

Q. Often?

A. I can not say very often. I have eaten it several times.

Q. Were you in a mess?

A. Yes, sir.

Q. Did your mess eat it?

A. Yes, sir. We made it in the form of a stew.

Q. What did you put in the stew?

A. Potatoes, onions, salt, and pepper.

Q. Salt and pepper?

A. Yes, sir; we fixed it as an ordinary stew is fixed.

Q. When you don't cook it at all, can you eat it fresh from the can?

A. I never tried it.

Q. Do you know the process the beef has undergone?

A. In preparing it?

Q. Yes, sir.

A. No, sir.

Q. Do you know whether it has been cooked?

A. Cooked some, undoubtedly.

Q. Do you know whether it had been roasted, or boiled, or what?

A. Boiled, apparently.

Q. As to the character of this beef, do they put in these tins good beef or bad beef?

A. What I think is all that I can say. I saw the beef and I think it was good beef that was put in the cans.

Q. Was there fat with it, or was it all lean?

A. Not a great deal. To me it appeared to be what I would call lean beef.

Q. And how did it taste?

A. Well, at first it was a very pleasant taste, I thought.

Q. As compared with the refrigerated beef, how much would you issue of this tinned beef?

A. Well, after we got this refrigerated beef we issued very little of the canned roast beef. It was mainly issued to the Spanish prisoners, sir.

Q. How did they like it?

A. They liked it, and the Cuban soldiers liked it.
Q. Well, as far as our own troops were concerned, was it issued as an emergency ration?

A. It was issued as a substitute—supposed to be a substitute—for the fresh beef.

Q. Well, then, you did not issue as much as you did the refrigerated beef?

A. Hardly in the same proportion.

Q. Did you yourself issue it to the Spaniards?

A. Yes, sir.

Q. And they made no complaints?

A. No, sir; it was new to them.

Q. And the Cubans?

A. The Cubans liked it; they preferred it to the bacon.

Q. In the preparation of it could you detect any extraneous article—any acid or chemical?

A. No, sir; I could not.

Q. Did it taste like natural beef?

A. Yes, sir.

Q. Well, in your experience, boiled beef is not as good as roast beef?

A. I prefer roast beef. I do not know how this beef is prepared. The beef—men unquestionably got tired of it.

Q. Well, how long did it take them to get tired of it?

A. Very soon after we landed in Cuba; they wanted the bacon.

Q. And what did you give them then?

A. Bacon where it was possible to get it to them. Sometimes we would not be able to give them bacon altogether and we would fill in the issue with this canned roast beef.

Q. Did you ever see any of these cans that were defective?

A. Spoiled?

Q. Yes.

A. There were some spoiled.

Q. How did that happen, Colonel?

A. I presume they were defective cans—not air-tight.

Q. The air had got in?

A. Probably; and spoiled it.

Q. What did you do then?

A. The only cases I can recall is where we buried them; three cases are the only ones I recall.

Q. They were sent back by the men?

A. No, sir; they were in the depot, before they were sent out.

Q. You found it out yourself?

A. Yes, sir.

Q. Were any sent back by the men?

A. Not to my knowledge.

Q. What would you say as to this tinned beef being issued to the troops?

A. I should say it is an article to be issued in limited quantity.

Q. How long have you been a commissary?

A. Well, in the volunteer department since last May; but I have served as a commissary in the regular service for a number of years.

Q. How long have you been in the regular service?

A. Since 1884. I have served in the West and at Fort Myer, Va.

Q. Were you in the infantry or cavalry service?

A. Cavalry service.

Q. When did you first know this tinned beef?

A. At Tampa. I heard of it there as an article that would be issued in lieu of the fresh beef, and the first time I ever saw it issued was at Siboney.

Q. Had you been on the plains?

A. Yes, sir.

Q. Never saw it at any of the posts there?

A. No, sir.

Q. Your idea is that the tinned beef, then, was introduced during the recent war; is that it?

A. To my knowledge, yes, sir. I have no knowledge of it ever having been issued before. The canned corned beef has been used ever since I have been in the service as an article of the travel ration; but the canned roast beef I have no knowledge of it ever having been issued before.

Q. Were you on duty at Tampa?

A. I was on duty there, but did not issue it there. I heard of it there in discussing what provisions we would have for issue to the troops in Cuba.

Q. You got back the 25th of August?

A. Yes, sir. Started back the 25th of August; got back September 1.

Q. What duty did you get then?

A. Depot commissary at Montauk Point.

Q. What did you do there with reference to either the slaughtered or tinned beef?

A. We had the refrigerated beef in cars there.

Q. You had no tinned beef?

A. We had tinned beef, but none was issued that I can recall.

Q. How long were you there?

A. I was there for about one month.

Q. The month of September?

A. Yes, sir.

Q. As to the refrigerated beef there, did you have any trouble with it?

A. Very little.

Q. Did you have any?

A. I can not recall any trouble of any importance at all. I believe a board of survey condemned about 50 pounds out of a big quantity that was issued; but there was no trouble with it, practically none.

Q. How many troops did you have there in September?

A. Number would vary; I should say from ten to fifteen thousand men. They were going away, many of them.

Q. How much of this beef would you issue a week?

A. Well, I could figure on the quantity—say an average of 12,000 men there. If I get a pencil and paper, I can figure it very easily—say 96,000 pounds a week.

Q. Do you want to make it more accurate? You can do so if you like.

A. Even this won't be accurate. Say, a pound a day, in the issuing three-tenths bacon, one-tenth salmon, and six-tenths fresh beef. The ration of fresh beef is $1\frac{1}{2}$ pounds; consequently when I say about a pound to each man a day—that would be approximately what it would be—that would be 96,000 pounds.

By Governor WOODBURY:

Q. That would be 84,000 pounds.

A. Yes, sir; 84,000; but we will say 90,000 pounds.

By Colonel DENBY:

Q. You always issued 84,000 pounds a week, in your opinion?

A. Yes, sir; about that.

Q. Did you have any complaint?

A. I believe I recall a case of about 50 pounds being rejected by a board of survey.

Q. Do you know how that happened?

A. I can not remember the facts in regard to it.

Q. Then I understand that you did not have from the men or officers, or the hospitals, or anybody at Montauk, any complaint except as to these 50 pounds?

A. That small quantity; yes, sir.

Q. As to the balance of the beef, how was it—good, bad, or indifferent?

A. The refrigerated beef?

Q. Yes, sir.

A. It was excellent beef; very good.

Q. And you issued no tinned beef?

A. None, except in the travel ration. We issued the corned beef there.

Q. Well, there has been no complaint about that. You never issued the tinned beef, the boiled beef, or roast beef as part of the travel ration?

A. Yes, sir; but not at Montauk Point.

Q. It was at Santiago?

A. Yes, sir.

Q. That is, it went with the people who were going aboard ship?

A. Yes, sir.

Q. What size cans did you issue, Colonel?

A. Usually the 2-pound cans.

Q. Two-pound cans?

A. Yes, sir.

Q. Your opinion, then, of this tinned beef—I mean the roast beef, of course—is that it is perfectly pure and perfectly good, but perhaps not as palatable as this slaughtered beef?

A. That is my opinion; yes, sir.

Q. It don't affect the health of the troops injuriously?

A. I do not believe it does.

Colonel DENBY. That is all I want to ask. Any questions, General Wilson?

General WILSON. Yes; there is one question.

By General WILSON:

Q. In issuing this meat to the Spanish prisoners, were they divided into brigades and divisions, and issues made in that way?

A. Yes, sir; they were divided into some sort of organizations.

Q. To whom did you directly issue it? Was he an American or a Spanish officer?

A. An American officer—Major Taggart—who was in charge of this particular duty.

By Colonel DENBY:

Q. How many were there; how many prisoners were there?

A. Between 12,000 and 13,000 we were feeding. The officer would come every day to the depot and get his supplies and take them there to distribute them to the prisoners.

Q. How many Cubans did you issue to?

A. Five thousand.

Q. Did you issue all of the ration to these Spaniards and Cubans?

A. Yes, sir; the complete rations—I do not know in regard to that; I think we cut down some; didn't give them all; that is, we did not give them the fresh beef.

WASHINGTON, D. C., *January 10, 1899.*

TESTIMONY OF CAPT. JAMES C. READ.

Capt. JAMES C. READ, being duly sworn, testified as follows:

By Colonel DENBY:

Q. State your name and rank and what positions you occupied during the recent war with Spain.

A. James C. Read; captain and commissary of subsistence of volunteers.

Q. Where were you employed, Captain, in your duties?

A. I was commissary of subsistence and acting assistant quartermaster on transports for five months.

Q. What transports were you on?

A. The transport *Massachusetts* and transport *Mobile*.

Q. What was your duty on these transports?

A. Well, as quartermaster or as commissary?

Q. As commissary chiefly.

A. It was to take charge of all commissary stores and property that was placed on board the ship, and to deliver them on orders to such other commissaries as might be designated.

Q. Do you mean to deliver them when they arrived at their destination?

A. Yes, sir; after transportation.

Q. What was the destination of those you were connected with?

A. Well, I delivered stores at Arroyo, Porto Rico, and at Santiago de Cuba.

Q. Well, what did you deliver to Cuba—what kind of stores?

A. I delivered a vast quantity of subsistence stores at Cuba, including—I am going to say here, not as testimony, that I delivered stores to Porto Rico first.

Q. You can take it in that order. What did you deliver to Porto Rico?

A. I delivered a vast quantity of miscellaneous stores, subsistence stores, at Arroyo, consisting of flour and hard bread and salt and beans and canned meat and fresh meat—refrigerated beef, rather.

Q. Well, now, I want to inquire about the refrigerated beef. Whom did you receive it from; what firm; who had prepared it?

A. Swift & Co. prepared and delivered the meat.

Q. Where?

A. To the *Massachusetts*.

Q. At what point?

A. Newport News. It was on the 25th and 26th days of July.

Q. How many pounds?

A. 203,170 pounds.

Q. Where were you, and did you see it when it was delivered?

A. Yes, sir.

Q. Did you see the beef when it left the refrigerator car?

A. Yes, sir.

Q. And how did it get aboard the ship?

A. Swift & Co. had two men there who superintended the transportation of the beef from the cars onto the ship. They had a man there, an engineer, who had charge of the machinery on the ship, and the Quartermaster's Department furnished the stevedores that moved the beef from the car to the ship.

Q. Well, did you see that beef as it was being moved?

A. Yes, sir; I checked it as it came on the ship.

Q. It was in quarters, was it?

A. Yes, sir.

Q. How many pounds?

A. 203,170 pounds.

Q. What was the condition of it?

A. It was wrapped in thin cloth when it came on there, but I took part of that cloth off in a number of cases and examined the beef; and they were large, handsome quarters. I thought it a particularly good lot of beef. One quarter, I remember distinctly, weighed over 300 pounds. It presented a wholesome and healthy appearance. At that time there was no discoloration on the beef; it seemed to be all right; in fact, it was when it went on board the ship.

Q. What did you do with it on the ship?

A. It was stowed in large refrigerator chambers and remained there until we removed it at Arroyo.

Q. Under whose charge was it on board the ship?

A. Directly under the charge of Swift & Co.'s representatives, who accompanied the vessel.

Q. Were they engineers?

A. One engineer and two other men.

Q. What did they do with it?

A. Swift & Co.'s engineer had direct charge, and was responsible for the successful operation of the refrigerating plant. The other two men would watch the temperature of the chamber, drop the thermometer down the well—

Q. Do you know what the temperature was?

A. Yes, sir.

Q. What?

A. From 31° to 36°; it ranged. It was only as high as 36° on two days. In a general way, I should say 34° was the general temperature at which the chamber was kept.

Q. What kind of refrigeration was it you had there?

A. The ammonia; what is known as the brine system; that is, they pump the sea water—

Q. I don't care about that; we have had all that. It was the ammonia system?

A. Yes, sir.

Q. How did it work?

A. Very well. It ran constantly, and only stopped for one hour during the whole trip.

Q. How long did it take you to go from Newport News to Arroyo?

A. We left there 28th of July and arrived at Ponce on August 2; and the vessel ran upon a reef there and remained fast until the night of August 6.

Q. That is one day and one night?

A. No, sir; she came there on the 2d and remained fast until the night of the 6th; then we fixed the vessel up in shipshape and proceeded to Arroyo, and arrived at Arroyo on the 8th of August.

Q. You left Newport News what date?

A. Twenty-eighth.

Q. Twenty-eighth of July?

A. Yes, sir.

Q. That was ten or eleven days?

A. Yes, sir.

Q. What did you do with the beef when you got there?

A. I reported there to General Brooke and to Col. Henry G. Sharpe, who was chief commissary at that point, telling him what I had on the ship, and particularly about the refrigerated beef, and I began to deliver that beef to Colonel Sharpe on the morning of August 15.

Q. Well, you began it; did you deliver it all?

A. No, sir; I delivered until August 26, inclusive, beef there.

Q. Do you know how many pounds of beef you delivered in that time?

A. 54,315 pounds.

Q. That left you nearly 150,000 pounds?

A. Yes, sir. I want to figure it a moment here. I will tell you what I delivered—

Q. That is right, is it—150,000 pounds, about?

A. Yes, sir.

Q. What did you do with the balance of the beef, Captain, and when?

A. 142,695 pounds I delivered at Santiago de Cuba.

Q. How far is it from Arroyo to Santiago?

A. Six hundred miles.

Q. How long did it take you to go there?

A. A little over two days—little more than two days.

Q. And when did you deliver the balance?

A. I delivered it between the days of September 1 and September 22.

Q. This beef then had been aboard the ship from what date?

A. July 25 until the 22d.

Q. Of September?

A. Yes, sir.

Q. Nearly two months.

A. Yes, sir; and I used some after that on the ship.

Q. What was the condition of the beef you delivered to Santiago?

A. I can perhaps describe things better by telling you how I noticed the beef varied from day to day.

Q. Go ahead.

A. It was the custom for me to go into the refrigerator every morning. We unloaded the beef at daybreak and put it on shore—this was at Arroyo—and had mule carts waiting for the beef there, and it was taken to the troops very rapidly; so that they would get by 10 o'clock in the morning, out at Guayama, beef that was removed from the refrigerator at 6 o'clock the same morning. I checked out the weights and went into the refrigerator and examined each quarter of beef as it came out. I noticed one thing very particularly—it was cold and quite a change from the temperature there—I noticed the sweet odor, or perfume, or bouquet, that was in that refrigerator. It was as if you went into a butcher shop here on a cold morning—it smelt sweet and used to make me hungry—give me an appetite. It was particularly sweet and wholesome. On the first day any change took place—it was on August 24—on that day there was a slight taint of the atmosphere. It was the first time I noticed it. The beef had been in there a month before there was any sign of disintegration. I could tell from that that there was a change in the condition of the meat.

Q. Well, how did that change affect the meat?

A. At that time the appearance of the meat was all right, and it was still perfectly good meat, and after we got to Santiago and began delivering the meat, why, day by day, that little odor in the refrigerator would get stronger and more perceptible, and then the beef began to discolor on the surface—turned dark or greenish.

Q. Did it have a mold on it, or what was called a "beard" or "whiskers"?

A. It was discolored. There was some mold, and, I should say, besides that, there was a surface discoloration of the meat.

Q. Well, you issued it, did you?

A. Yes, sir. We put it ashore daily there.

Q. Was it in fit condition to be issued?

A. After they would take that meat ashore and trim it—this was at Santiago—the meat underneath this outside, exposed part was sound and sweet and perfectly fit to eat.

Q. Whom did you deliver that meat to at Santiago?

A. Swift & Co.'s men were there, and it was not directly consigned to me, and they accepted the meat and worked in with the chief commissary there. It was never very clear to my mind there—the beef business—never having seen the contract.

Q. Did Swift & Co. have a refrigerator there?

A. Yes, sir; they had just completed their refrigerator while I was at Santiago, and the last part I put ashore there was some 80,000 pounds, and that went into that refrigerator. The rest of it, while the refrigerator was being erected, I issued daily from the ship.

Q. Do you know anything about the beef after it got ashore?

A. Yes, sir; I used to go and watch it being cut.

Q. Do you know anything about the beef that was issued to the troops for consumption?

A. There was a block there, and the sergeant would cut it up—the part used by the troops in the immediate vicinity.

Q. What was the condition of it?

A. It was all right underneath. It was trimmed of those parts that were doubtful.

Q. Do you know whether there were any complaints of it?

A. Yes, sir; a number of complaints were made.

Q. Tell us about it.

A. I think Colonel Hood's regiment of immunes—I heard through other officers I met and through Colonel Osgood—they were complaining about that beef.

Q. Said it was not good?

A. Yes, sir.

Q. Do you know whether they would send it back and get other meat?

A. No, sir; I would not know that.

By Governor WOODBURY:

Q. Was Colonel Osgood chief commissary there.

A. Yes, sir; he was chief commissary there.

By Colonel DENBY:

Q. As to the balance of the beef, you did not deliver the whole of it there?

A. No, sir; I made daily deliveries from the wharf until the refrigerator was completed. I haven't the exact figures of what went into the refrigerator, but the remainder, amounting to about 80,000 pounds, was put into the refrigerator. It was the first beef that went into the refrigerator.

Q. Do you know what became of that?

A. No, sir. I sailed away with the ship after that and did not know what became of that beef.

Q. You do not know whether that beef had a board of survey on it and was condemned?

A. I have no knowledge of that beef officially.

Q. Is that the only ship you know anything of officially?

A. Yes, sir; that was the only shipment of beef that went there under my charge.

Q. Now, as to the shipment to Cuba, do you know anything about that?

A. No, sir; there was another ship that had been distributing beef when I got there.

Q. Do you know anything about the *Manitoba*?

A. No, sir; I was aboard her when she had beef aboard her in the harbor of Ponce, but I did not examine that.

Q. You had nothing to do officially, though, with any of the beef except what was on the *Massachusetts*?

A. Yes, sir.

Q. Have you told us all you know about that beef? If you have heard anything on good authority you may state it.

A. I talked with the Commissary-General about the board of survey that was held on the beef down in that refrigerator at Santiago, but I don't think that would form a valuable part of the testimony. There is one other thing, and that is, that on the *Massachusetts* itself I consumed 6,170 pounds of that beef for the use of the officers and crew of the ship. I began to use that about the 10th of September; that was the only beef I could get, and we used it on the ship; it was the only fresh

beef we had until the 28th of September. It gave satisfaction to the men and officers that ate it on the ship.

Q. Did it give satisfaction to you?

A. Yes, sir; I ate it every day. From day to day they would cut away a little more of it, but the major part was always sound and agreeable to eat.

Q. It was very hot down there?

A. It averaged about 90° during the day out on the ship under an awning.

Q. How far did this beef have to go from the points where it was delivered before it reached the troops themselves?

A. I would not say just the distances around there that they undertook to transport that beef. I did not get it. My duties were around the harbor.

By Governor WOODBURY:

Q. I would like to ask you if you had any knowledge or suspicion that any of this meat had been chemically treated to preserve it?

A. No, sir; I had no suspicions on that point at all. I never dreamed of such a thing.

Q. Was there ever any intimation or rumor made to you that that beef or any other had been chemically treated to preserve it or for other purposes?

A. I never heard of it until I read of it in the papers during the last few weeks.

By General McCook:

Q. You had other commissary stores aboard that ship. Were they subject to loss?

A. In what way?

Q. On account of spoiling. Did you have any vegetables aboard that boat?

A. Yes, sir; I had charge of the subsistence for 30,000 men for forty days, 1,200,000 rations. All my papers are on a vessel now coming back from Cuba. There decayed and became unfit for use 355 barrels of onions on the *Massachusetts*.

Q. What was the occasion of their loss?

A. While the ship was at Newport News a quantity of fresh vegetables were placed on board before we started out, and I delivered as much of the stores as I was ordered to deliver at Arroyo, according to the number of men stationed within reach. They were given fresh vegetables right straight along, but we did not consume the supply fast enough to keep it from getting bad.

Q. Where were these vegetables stored?

A. Where?

Q. In what part of the ship?

A. I had them stored on one of the upper decks where the air would move and it would not be too hot for them. I had them all stored in a very good place.

Q. And still they decayed?

A. Yes, sir; very rapidly; and a great quantity of potatoes consigned to me on the *Washington* decayed despite all our efforts; in selecting them they were all picked over.

By Colonel DENBY:

Q. Were you appointed from civil life?

A. Yes, sir.

Q. What State?

A. Pennsylvania.

Q. What had been your occupation before that time?

A. Doing engineering work, building street railways, and I was connected with the operation of steel works.

Q. Now, do you know anything about the tinned beef?

A. I had about 500,000 pounds of the roast beef canned.

Q. On what ship?

A. On the *Massachusetts* and one other ship.

Q. What did you do with them?

A. Delivered part of it to the chief commissary at Arroyo, and the remainder was delivered to the chief commissary at Santiago de Cuba.

Q. What was the condition of the tinned meat?

A. It was in good condition.

Q. Did you use any of it?

A. Yes, sir; I ate it frequently.

Q. Where were you when you ate it?

A. In camps out through Porto Rico, around Arroyo and Guayama, in houses occupied by officers.

Q. Did you eat any of it aboard ship?

A. I did, on two or three occasions.

Q. You had a mess on two or three occasions?

A. No; we did not serve that to the mess on the ship. Going down a number of men had that on the ship, and I picked up the cans and ate out of them a number of times, when it was uncooked; and on shore I ate some that was cooked.

Q. How did it taste uncooked?

A. It was not what I would call an agreeable—

Q. Palatable food?

A. Agreeable or palatable food. I would not eat it from choice.

Q. What was its condition as to purity, as to whether it was spoiled or not?

A. It was perfectly good and sound and sweet that way.

Q. You found no objection as to its soundness?

A. No, sir.

Q. Simply as to its not being palatable?

A. No, sir; I have tasted beef more agreeable to my palate than that was.

Q. Did you eat it with onions and potatoes?

A. Yes, sir; and in hash and cooked in a sort of Hamburg steak.

Q. Well, tell us what your opinion is of that meat and your knowledge.

A. I have had some very good meals and satisfactory meals from that roast beef canned when properly cooked, made into a stew or baked into a hash, and made into those meat cakes.

Q. Did you ever see a tin that was spoiled?

A. No, sir.

Q. How many tins have you seen opened?

A. That would be pretty hard to tell. I have seen it all through those camps.

Q. You don't know it was issued to the transports—whether as an emergency issue or as a regular ration? After it got to the troops it passed out of your jurisdiction?

A. Yes, sir; although I was interested in the thing and watched it. I think three-tenths of the ration at Arroyo, in General Brooke's command, was the roast beef canned.

Q. Was General Miles there at that time?

A. He was at Ponce at that time.

Q. Did any of this beef go to Ponce?

A. The only time was when the ship was six days in the harbor of Ponce, four of which she was on the rocks.

Q. Were any complaints made to you officially as to that beef by any officer?

A. I spoke to General Miles; informed him of the presence of beef upon the ship, and he said—I think I remember quite distinctly what he said—"I understand that that beef is not good. Do you know that it is?" I replied that I thought it was good, and he then said, "I understand that it is not good; and I can secure right here all the native beef that I require." Those are the only words he ever said to me at Ponce regarding beef.

By Governor WOODBURY:

Q. About what date was that?

A. August 4 or August 5, in General Miles's office

By Colonel DENBY:

Q. Were you under his orders?

A. My orders directed me to report to the chief commissary, Sharpe.

Q. He was on General Miles's staff?

A. Chief commissary on General Brooke's staff.

Q. Did anything result from this conversation?

A. The vessel was ordered to proceed to Arroyo immediately after she was taken off the rocks there, and there was no occasion, no chance, to deliver any of the refrigerated beef. I had no chance to deliver any of this to General Miles.

Q. How far is it from Ponce to Arroyo?

A. From 38 to 40 miles.

Q. Then you had no orders from General Miles not to deliver it at Arroyo?

A. No, sir.

Q. You had no orders from his chief commissary on that subject?

A. No orders from anyone on that point.

Q. How did you deliver this; did you put it on shore of your own motion or wait for a requisition?

A. I had a number of conversations with the chief commissary and also the chief quartermaster, Major Carson, at that point, and we arranged for the transportation of the beef from the ship to the shore and from the shore into the camps where the troops were stationed.

Q. You took from these conversations, then, your orders to deliver it?

A. Yes, sir.

Q. Did you deliver all the tinned beef you had on board the ship at Arroyo?

A. No, sir; just a part of it there, and the balance to Santiago.

Q. How much did you deliver at Arroyo?

A. I can not state in pounds, but it was the proportion of the ration which Colonel Sharpe required for thirty days; I think I delivered supplies for the troops there for thirty days.

Q. Well, what portion of this tinned meat would you put in the rations?

A. I can not remember how many men there were stationed at that point now. It is too far back.

Q. Compared with what you delivered at Santiago—how much did you deliver at Santiago?

A. Everything I had on the ship there. I cleaned the ship up. I can not state the amount.

Q. If you could give us the proportion you left at Porto Rico—at Arroyo?

A. I will try to do that. You see I had these stores on four different ships, on different parts on different ships, and it is confusing, as my accounts are all lumped together. I think we can get at this—about 50,000 pounds.

Q. At Arroyo?

A. Yes, sir; delivered at Arroyo.

Q. Did you encounter any of that beef after you delivered it at Arroyo?

A. Yes, sir; I went ashore and ate messes of it.

Q. Where?

A. With the Fourth Ohio troops and the Fourth Pennsylvania Regiment.

Q. I presume you ate with the officers, didn't you?

A. Yes, sir; but they used it.

Q. Did you hear any complaints about it?

A. In a general way, now, I would say it was not commended, and officers would occasionally say to me, "That beef is all right when it is cooked."

Q. Did you hear any complaints as to its soundness—as to its possessing any deleterious quality which would be injurious to troops or persons eating it?

A. No, sir; I never did.

Q. It was only as to the taste?

A. Yes, sir.

Q. You delivered the balance, you said, to Santiago?

A. Yes, sir.

Q. To whom?

A. Col. Henry B. Osgood, who was chief commissary at that point.

Q. At Santiago did you encounter the beef again in your trips around?

A. Yes, sir.

Q. Then it was used somewhat extensively?

A. I would come across that beef, I suppose—I would eat half a dozen meals, and then I might come across it.

Q. Then you found it palatable when cooked?

A. Yes, sir; when stewed after being taken from the can.

Q. What would you say, Captain, as to the use of that meat in the Army? What meat would you prefer of all the meats?

A. The refrigerated beef. It is the same as I eat when I am home.

Q. And where would the beef on the hoof come?

A. I ate beef on the hoof a number of times at Porto Rico, and I did not like it very much; didn't like it at all, when compared with the refrigerated beef.

Q. How does it differ when compared with the refrigerated beef?

A. It had to me an unsatisfactory taste; it may be that I did not acquire a liking for it, but in a general way I turned away from the native beef.

Q. As to being stringy, how was it?

A. I ate it once when it was pretty good, and then I ate it at Guayama, when it was bad beef; it was new and tough. That was at the hotel at Guayama. I ate the native beef there, and it was tough, and when you would go to cut it it would slip away from the knife.

Q. In that beef did you detect at any time any chemical action?

A. That was the native beef I was speaking of.

Q. Yes, but now I mean the tinned beef?

A. Officers told me, if you place it in warm water the head or top of the can would round up, showing there was a gas in it, and they would punch a hole in it and a little gas would escape.

By General McCook:

Q. You had to do that or have an explosion?

A. Yes, sir.

Q. It was moist in there and the heat would generate steam?

A. Yes, sir.

By Colonel DENBY:

Q. How was it as regards boric acid and other chemicals?

A. When I had that conversation with General Miles I thought he meant this: There was some talk when the refrigerated beef first arrived about the ability of that beef to be taken out of the ship and carried a number of miles during several hours; some men said the beef would not remain good after being exposed a couple of hours; that was the only conversation, as to whether it would stand transportation. I never heard any talk about chemicals until I came home here a few weeks ago.

Q. Did General Miles suggest anything to you in that conversation?

A. No, sir.

Q. Do you know Dr. Daly?

A. Yes, sir; very well.

Q. Where was he?

A. At Ponce, when I was there.

Q. What was his position?

A. Major and chief surgeon there.

Q. Was he present at any of these conversations?

A. No, sir.

Q. I want to know whether Dr. Daly was present at any conversation you had with General Miles?

A. No, sir; he was not.

Q. Did you see him at Ponce?

A. Yes, sir; a number of times.

Q. Dr. Daly states in his paper which has been submitted to us, "At Ponce, much of the beef I examined arriving on the transports from the United States was also of the same character, being apparently preserved by injected chemicals to aid deficient cold storage." Now, was any beef delivered at Ponce except what you delivered?

A. I did not deliver any at all at Ponce.

Q. Didn't you understand after that conversation you had with General Miles that he ordered beef on the hoof to be consumed?

A. Yes, sir; I understood they were using beef on the hoof at that time.

Q. You gathered from his conversation that he did not want this slaughtered beef?

A. The refrigerated beef, you mean?

Q. Yes.

A. Yes, sir; he did not want it.

By Governor WOODBURY:

Q. Ask him if he expressed his opinion, generally, as to refrigerated beef, or only what he had on this vessel; that is, whether General Miles objected generally to the refrigerated beef or only what you had?

A. The only conversation I ever had was as I have already stated, and I knew I was going to stay at Arroyo and I did not pursue it; but I understood by inference that the point at stake was whether the beef could be taken out as far as 10 or 15 miles through the hot air and then be issued and received with favor.

By Colonel DENBY:

Q. I will read you what Dr. Daly says. He says, "While on duty at the headquarters of the Army at Tampa, at the time of the embarkation of the Shafter expedition, Colonel Weston, the efficient chief commissary, showed me a quarter of beef that had already, as a test, been sixty hours in the sun without being perceptibly tainted, so far as the sense of smell could detect. It is impossible to keep fresh beef so long untainted in the sun in that climate without the use of deleterious preservatives, such as boric acid, salicylic acid, or nitrate of potash, injected into it in quantities likely to be hurtful to the health of the consumer. At Ponce, Porto Rico, much of the beef I examined, arriving on the transports from the United States, was also of the same character, being apparently preserved by injected chemicals to aid deficient cold storage." Did Dr. Daly or anybody else make a statement of that kind to you while you were at Ponce?

A. No, sir; I heard nothing of the sort, and the refrigerator containing the beef on the *Massachusetts* was not opened during her stop at Ponce.

Q. Hence, nobody at Ponce could know anything about the character of beef you had on board that ship?

A. Nobody at Ponce who was not at Arroyo could know, as the refrigerator was not open while the ship was at Ponce.

Q. Can you tell us what time the beef at Ponce, Porto Rico, of which Dr. Daly spoke, was delivered there?

A. No, sir; I could not tell you that. The *Manitoba* was the next vessel going down with this refrigerated beef on board, and I think she arrived at Ponce about five days after I left.

Q. And you do not know what became of her beef, whether it was delivered at Ponce or not?

A. I do not know anything about her beef officially; I know, of course, myself that it was destroyed.

Q. But you state that neither boric acid, salicylic acid, nitrate of potash, nor anything else had been injected into the beef you had on board the *Massachusetts*?

A. If it was, I never knew it; nor was I able by the test of the beef to find out or suspect that anything had been used in connection with it.

Q. And nobody who received it from you ever made any complaint as to chemicals being used in it?

A. No, sir.

Q. And you never heard of that until you heard of the statement of General Miles?

A. That was the first time.

Q. That is after General Miles's testimony, on the 21st of December?

A. That was the first time I ever heard of any chemicals in connection with the beef.

Q. If there had been any complaint of that kind in connection with the beef, would you have heard it?

A. Yes, sir; I heard complaints promptly about things that did not suit.

Q. You know nothing about the *Panama*?

A. No, sir; I discussed that question—I do not know that it is any testimony.

Q. Have you discussed it with Dr. Daly?

A. No, sir; but with Captain Hunt, a Pittsburg chemist. He was a professional chemist.

Q. Where was he?

A. At Arroyo and Guayama.

Q. While you were there?

A. Yes, sir. This canned beef and fresh beef was issued to his command.

Q. Was he a regular?

A. No, sir; he was a volunteer, commander of Battery B, Pennsylvania; and I asked him if he could notice the presence of chemicals in the beef, knowing he was a skilled chemist.

Q. When did you ask him that?

A. On the 2d of January; and he said no chemicals were there, so far as he could detect.

Q. Did he say he made a chemical examination?

A. He said it would have been impossible for him to make a complete examination unless he had apparatus there with him.

Q. What did he say about tinned beef?

A. He said it was all right when properly cooked.

Q. Dr. Daly said the beef looked well. He said, "When detailed to take charge of the transport *Panama* for conveying convalescents to the United States I obtained 2,000 pounds of fresh beef from the commissary at Ponce. It looked well, but had an odor similar to that of a dead human body after being injected with preservatives, and tasted when first cooked like decomposed boric acid; while, after standing a day for further inspection, it became so bitter, nauseous, and unpalatable as to be quite impossible for use. I was therefore obliged, owing to its condition and the just complaints of the sick about it, and the disgustingly sickening odor it emitted when being cooked, and its mawkish, flat taste when served, and the safety of the patients—255 convalescent soldiers—on board, to

organize a board of survey, condemn, and throw 1,500 pounds (all we had) overboard; consequently the convalescents were entirely without much-needed fresh beef, making the duty of bringing the men to the United States in an improved condition a very difficult matter." In any beef that came under your examination or inspection, or issue, did you notice any of these deleterious things, such as its being putrid, nauseous, unpalatable, or having an odor like a dead human body?

A. I have already testified that when I went down into the refrigerator of the ship for the first month it was perfectly wholesome and agreeable, which would not have been the case had it smelled like a dead human body; but after the beef had been there a month it began to disintegrate, as any self-respecting meat would. It was all right when on the ship; and when the proper time came for it to deteriorate, it did.

Q. Do you ascribe this odor to the use of chemicals?

A. No, sir; it would be the same as if I got meat in my own home. I have had the same thing happen in my own home. I have hung a leg of mutton up in my home and I would see signs of decay after a time. I only know the beef was all right and I ate it, and I did not find anything wrong with it; and after it had been on board a month the surface began to show signs of color, but underneath it was all right.

Q. Is there anything else you want to state, Captain?

A. No, sir; that is all I want to state about it.

WASHINGTON, D. C., *January 11, 1899.*

TESTIMONY OF EDWARD TILDEN.

Mr. EDWARD TILDEN appeared before the commission, was sworn, and testified as follows:

By Colonel DENBY:

Q. What is your name, residence, and occupation?

A. Edward Tilden; residence, Chicago; occupation, treasurer of Libby, McNeill & Libby.

Q. How long have you been employed by that firm? Is it a firm or corporation?

A. It is a corporation. I have been a director two years and treasurer during nearly all that time.

Q. What is the business of that firm?

A. Principally canned meats.

Q. Do you do anything in refrigerated meats?

A. We do with the local Chicago trade. We ship scarcely, if any, refrigerated meat.

Q. We do not care to go into refrigerated meat with you except in a general way, because we have had it very fully. You can state, however, whether you are familiar with the mode of preparing refrigerated meat by Swift & Co.?

A. Yes, sir; I am.

Q. Wherein, if in anything, does the process of your firm differ from theirs with regard to refrigerated meat?

A. In no particular way.

Q. You have Government inspectors, as they have?

A. Yes, sir.

Q. You kill the steer and cut him up and put him in the cooler about as they do?

A. Practically the same.

Q. Now you can answer whether in your process you have used any other process?

A. Never, sir.

Q. You prepare meat just about the same way as they do?

A. Yes, sir.

Q. We have not gone into the tinned-beef question, and if you will state in as succinct a manner as you can the process, just begin and tell us straight through, as briefly as you can make it, but leave out nothing.

The WITNESS. Shall I commence with the purchase of the animal?

Colonel DENBY. Commence with the purchase of the animal. I will first ask you how much beef business you do.

A. I estimate this year our canned-meat business will amount to between eight and nine million dollars.

Q. And you can tell us in that connection where you send it.

A. I do not think there is a spot on the earth we miss, Colonel.

Q. Mention them, please.

A. South Africa uses large quantities, Alaska uses large quantities, Finland, Norway, Sweden, the British Empire—that is, the British Islands—France, and Germany.

Q. How about India?

A. India, South America, and we have shipped some little to Australia, even.

Q. You have not mentioned the far East. Do you send anything to China or Japan?

A. We send to Japan and China, but limited quantities to China, because it is too expensive for China to eat. Japan uses a considerable amount.

Q. Siam or Siberia?

A. Not directly. Our export agents in San Francisco or London may reach them.

Q. About what is the value of your product in a year, approximately?

The WITNESS. I do not understand the question. Do you mean the total amount of our output?

Colonel DENBY. Yes. What is the price of the meat you sell all over the world?

The WITNESS. The price of it?

Colonel DENBY. The price of it in dollars and cents.

A. I have already stated, between \$8,000,000 and \$9,000,000.

Q. Does that \$8,000,000 or \$9,000,000 cover the whole of your business, foreign and domestic?

A. Yes, sir.

Q. Now, tell us all about the manufacture of this article. Commence with the beginning, and go straight through.

A. The cattle are purchased principally in Kansas City, St. Louis, and Chicago.

Q. What is the quality of these cattle?

A. These cattle are of good quality, but we aim to get rather a lighter cattle than what is termed native beef, in order to get a larger percentage of leaner meat, which is handled more economically and at the same time gives better satisfaction in the can. They are purchased under the eyes of the Government inspector, and after having been passed by him.

By Governor WOODBURY:

Q. Can you state the age and weight of these animals, and whether steers or cows?

A. The ages run generally about 3 years; in fact, there are few cattle marketed over 3 years or under 2. You spoke of the sex?

Q. Yes, sir.

A. Well, they run, perhaps, an even number, or perhaps a shade in favor of steer cattle.

Q. The weight?

A. The weight, dressed, would run from 500 to 650 pounds, dressed. They are, after being purchased, as I said, under the eyes of a Government inspector, and after being passed by him they are slaughtered.

By Colonel DENBY:

Q. Does he make an inspection of each one of these animals?

A. He is supposed to. He is supposed to look them over carefully and condemn anything there is any suspicion attached to as far as disease is concerned. In some cases he may not be satisfied in his own judgment, and in that case he holds the bullock until he is satisfied, and they are then slaughtered. At the time they are slaughtered a Government inspector and, generally, a Government veterinarian walk the slaughterhouse together. Sometimes the veterinarian is not there, but there is never a time when one of the two is not there.

Q. During that time, where is the meat—the carcass?

A. The meat is being slaughtered at that time. It is being killed on the beds and being rolled back on the rolls, and they watch every move made and examine each carcass very carefully.

Q. Well, after they examine the carcass, what do they do?

A. If there is any trace of disease, or what would be called a damaging bruise, sometimes a car bruise, the carcass is condemned.

Q. What is done with it then?

A. It goes into what is called the grease tank and rendered into grease and sold for what it will bring as grease, under their supervision. They watch it into the tank and watch it out of the tank and watch its disposition. In addition to the inspector that walks the floor—

Q. (Interrupting.) Do you appoint or pay these men?

A. No, sir; we have nothing whatever to do with them.

Q. The Government of the United States does?

A. The Government of the United States does. In addition to the inspectors walking the floor and watching the killing process, we have a permanent inspector in our slaughterhouse who watches to see that nothing gets into the slaughterhouse by any means whatever that is not Government inspected. He stays in our packing house all the time.

Q. Who is he employed by?

A. The Government of the United States. We have nothing whatever to do with him. That is his business, however. Some meat might come in from some other packing house. It is his business to see that all meat bears the Government inspection tag or stamp.

Q. You have not said anything about the tag or stamp. Explain that?

A. The meat, after having been passed as wholesome, free from disease and fit for use, is stamped or tagged by the Government inspector.

Q. Now you are speaking of tinned meat?

A. They are all handled identically the same way. Tinned meat is handled the same way as refrigerated beef so far as the inspection is concerned.

Q. The beef that goes abroad is tagged and the beef for domestic use is stamped?

A. Yes, sir.

Q. All the meat that goes into the tins finally is treated in that way?

A. Yes, sir.

Q. Now you have gotten past the Government inspection; then what do you do?

A. After it has passed the Government inspection on the floor of the slaughterhouse it is run into a cooler or refrigerator, where the animal heat is taken out of it. It is allowed to cool and become firm and fit to handle.

Q. About how long does it stay there?

A. From twenty-four to forty-eight hours.

Q. At what temperature?

A. From 35 to 40 degrees.

Q. Well—

A. After it has hung in the refrigerator that length of time it is taken out and cut up. The bones are taken out and it becomes boneless meat.

Q. Do you mean that all of it is done that way, the hind quarter and fore quarter, or only parts?

A. Well, we select such parts of it as we desire to use for canning purposes and have the bone taken out. The other we bone or do not bone, just as the demand warrants, for different cuts of meat. The bones are taken out, and in the case of roast beef, we use generally—the bulk is the fore quarter, what in butcher parlance would be called the brisket, or shoulder. In fact, the bulk of the fore quarter, except the neck and shank and rib, which is really the choice part of the carcass, the bones are taken out of that meat and it is then sent to the cooking floor. It is absolutely fresh roast beef—the beef sent to the Army. It is then cooked and boiled, or what might be termed parboiled.

Q. How is that done?

A. Steamed.

Q. In a great vat?

A. No, it is not a great vat; it is a number of small boilers, not in one great vat, as it can not be handled as nicely as in smaller cooking boilers.

Q. This meat is cooked without anything in it?

A. Nothing whatever except what comes into contact with it.

Q. No chemicals?

A. None whatever.

Q. And you put nothing in the boiler except the meat?

A. Nothing.

Q. And salt?

A. Nothing but the meat itself.

Q. Then you cook it, do you?

A. We cook it; yes, sir.

By Governor WOODBURY:

Q. How long?

A. It is cooked, depending on the size of the boiler, from twenty minutes to half an hour, depending on the amount of stuff there is in there.

By Colonel DENBY:

Q. After that—

A. It is taken from there and put into cans.

Q. What size cans?

A. Two-pound cans net of meat is what was furnished the Army in this case.

Q. Nothing put into the cans except the water?

A. Nothing but a little jelly.

Q. Jelly?

A. Yes, sir.

Q. What kind of jelly?

A. Well, calves-foot jelly, really. We put in a small quantity of that.

Q. What is the object of that?

A. It binds the meat and flavors it a little and makes it more palatable.

Q. Any chemicals in that?

A. None whatever; none of any kind.

Q. Well, after you put it into the cans, what do you do with it?

A. We seal the can and put it in a retort, which is really a roaster. The meat, you understand, has been parboiled up to this time, but now it is roasted in the can. It is put in a processing vat and run up to—

Q. (Interrupting.) Is that before the cans are sealed?

A. No; it is after the cans are sealed.

Q. After they are sealed?

A. Yes, sir.

Q. After they are hermetically closed?

A. After they are closed; yes, sir. They are inspected after that and put into that processing vat and heated to 220° or 225° of heat and then taken out and vented.

Q. What do you mean by that?

A. Any air is allowed to escape through the vent hole.

Q. You have a hole for that purpose?

A. Yes, sir,

Q. And the air escapes?

A. Yes, sir.

Q. And then what do you do?

A. That is sealed up. It is a point not larger than a pin prick.

Q. That is while it is hot?

A. Yes, sir; and then it is sealed up and ready for use. In fact, the putting up of roast beef is the simplest process in the packing business.

Q. What kind of meat is it when you open it, as to its good qualities or bad qualities?

A. Well, I might be prejudiced as far as that is concerned, but I think in answer to that question I can only say to you that in twenty-five years we have been selling hundreds of thousands and millions of pounds of it and we are selling it to-day, and the people like it.

Q. During this war did you sell to the Government?

A. Yes, sir.

Q. At what point?

A. New York, Washington, St. Louis, Chicago, and San Francisco are the points that I remember.

Q. And do you know what became of the meat after you delivered it to the Government?

A. No, sir; only from hearsay.

Q. When did you first commence to prepare meat in this way?

A. Twenty-five years ago.

Q. And do you know when you first commenced to sell it to the Government?

A. No; I can not say as to that.

Q. And you sold pretty large quantities to these various camps?

A. We sold quite a large quantity; yes, sir.

Q. Well, now, will you tell us whether you had any complaints from abroad, Europe or India, as to this meat?

A. I do not remember of a complaint.

Q. Well, have you had any at home, in this country?

A. No, sir; not even from the Government.

Q. Have you had any cans returned to you and had to duplicate them?

A. I do not remember of a can of roast beef having been returned.

Q. And you furnish, of course, very large quantities—you could not tell us how much you sold to the Government during the war?

A. Roughly, I should say 2,000,000 tins.

Q. But after you sell it, it goes into the hands of the commissary, and you don't know where it goes then?

A. We do not know where it goes. It is distributed by him.

Q. You could not tell us whether any of this meat went to Porto Rico or Cuba?

A. Nothing; only from hearsay.

Q. You sell it to the Government, and they take it and do what they please with it?

By Governor WOODBURY:

Q. What effect does what you call roasting have upon this beef after it is inclosed in cans? What is the object of roasting it?

A. The effect it has on it is to thoroughly cook it and give it a trifle better flavor than it would have ordinarily; that is, if it were allowed to be sent out parboiled as it is before it goes into the cans it would not be considered well enough cooked.

Q. Are these cans open when roasted?

A. Oh, no; sealed.

Q. What price did the Government pay for roast beef?

A. I could not tell you. I did not come prepared with the figures.

Q. What is done with the liquid that results from the parboiling of this beef?

A. Well, that—you understand, gentlemen, there is nothing in the packing business that is wasted. We use that liquor in some cases as the basis for soup stock and in some cases we put it in the tank. The liquor that comes from the meat is—water is evaporated out of it, probably 50 or 75 per cent—it is then reenforced by ox tail, which is a very meaty part of the carcass itself, and vegetables are added, and that is the basis for a soup stock.

Q. Do you make any what is commonly known as extract of beef out of this?

A. No, sir.

Q. That is simply the result of the treatment of this beef and you save it, as anyone would?

A. Yes, sir. We would be very glad to put it in the can, but the Government will not accept anything but solid meat.

By General WILSON:

Q. You said you parboiled this meat from twenty to thirty minutes. Then after having parboiled it you put it in the cans and you roast it. What is the exact process of that roasting? Is the can put in a furnace for any length of time?

A. It is put in a steam retort. The top is bolted on. There are trays—the retort is round, and there are perhaps thirty trays with these cans on them with one can on top of another and the top is bolted down.

Q. It is rather steamed than roasted?

A. The fact of this being in a tin and the steam being put at a higher temperature than 212° really makes it a roast.

Q. Then this little aperture made in the can, is that made before it goes in or after it comes out of this steam chest?

A. Immediately, and as soon as it can be made, as the trays of tins are taken out. They are taken out just as quickly as they can be handled by the men and a little puncture is made in them.

Q. How long is that allowed to remain?

A. Just an instant, until the air escapes, and we seal it at once.

Q. You remarked, and probably I misunderstood you, you spoke of the necks, ribs, and shanks, and then added "which is the choice part of the beef." Do I understand—

A. I said we used the fore quarter with the neck, shank, and rib off. We do not use the neck, we do not use the shanks, and we do not in all cases use the rib, although the rib is good enough to use if we want to.

By Captain HOWELL:

Q. Do you put the date on the cans?

A. No, sir.

Q. Does any packing house do that?

A. Not to my knowledge.

Q. You never saw any with the dates on them?

A. No, sir.

Q. Now, it has been charged in the newspapers that a canning company sold to the Government a lot of old stock they had on hand; did your house?

A. No, sir.

Q. You don't keep any old stock on hand?

A. No, sir; the facts are, since I have been acquainted with the canning business it has been a difficult matter to have canners to supply the demand.

Q. You have demands all over the world for it?

A. Yes, sir.

Q. What governments do you supply with canned beef; this kind of beef that you have supplied to this Government?

A. Directly to the governments we are not supplying any at the present time.

Q. Have you?

A. We have through our agents.

Q. Russia?

A. No.

Q. Japan?

A. Yes, sir.

Q. Of this identical roast beef you have been telling about?

A. Yes, sir; and, further, in relation to Japan I would be glad to say that the surgeon-general of the Japanese army visited our house a short time ago and he expressed himself as highly pleased with it.

Q. Have you furnished any to the English army?

A. Yes, sir.

Q. France?

A. Yes, sir.

Q. Germany?

A. Yes, sir.

Q. They have bought this meat? Did you ever have any complaint from these Governments about the improper condition of the meat?

A. No, sir; never.

Q. And it is the same meat that you furnished 2,000,000 pounds of to this Government?

A. Identically.

Q. I understand there is no old stock kept on hand. You work that off?

A. We never have any old stock on hand. It is reasonable to suppose that no one has 2,000,000 pounds of old stock on hand.

Q. There is nothing like chemicals in these tins? Nothing but the meat?

A. Emphatically, there are no chemicals.

By Dr. CONNER:

Q. At any stage of the preparation of this meat, between the animal on the hoof and the cans on the market, do you make use of boracic acid for any purpose whatever?

A. No, sir.

Q. Salicylic acid?

A. No, sir.

Q. Nitrate of potash for any purpose?

A. No, sir.

Q. Do you make any use of common salt for any purpose?

A. No, sir.

Q. Do you employ any ordinarily used preservative?

A. No, sir.

Q. Do you use any preservative that is not in common use?

A. No, sir.

Q. You are prepared to say that you make no use of anything whatever to preserve the meat?

A. Yes, sir.

Q. What grade of cattle do you use for this purpose?

A. We prefer a light grade of cattle, lighter than is ordinarily used for beef.

Q. Are the poorest cattle in the market, or very poor cattle in the market, accepted by you for use in the preparation of this canned meat?

A. Not by any means.

Q. Not at all?

A. No, sir.

Q. Do you, or do you not, use old worn-out cows and steers?

A. No; sir. Steers can not become worn-out, anyway.

Q. Well, the oxen, I mean. You have a technical difference between steers and oxen. I mean working cattle.

A. No, sir. I might add to that, that nothing comes in contact with this meat but water, and I wish to emphasize that point. Nothing whatever touches it.

By General McCook:

Q. And after that meat is properly canned, it ought to be good how long?

A. One hundred years if the can never leaks. If the can leaks, of course, and the air is allowed to get to it, it will spoil it, but if it is sealed it will be just as good one hundred years from the date it is put in the can as the day it is put in.

By Colonel Denby:

Q. You were asked about what was put on the cans. You put labels on them, don't you?

A. Yes, sir.

Q. And what do you put on the label?

The Witness. You mean the name of the beef?

Colonel Denby. You say you put the label on the tins or do you not?

A. We put our name and address and the kind of goods on the cans.

Q. Nothing else?

A. Well, we usually, in some cases, put on directions in regard to the can before opening.

Q. Do you regard that as important?

A. Well, it comes out in better shape. Usually canned meats will turn out of the can in better shape if first put in warm water than if they are cool, in the case of roast beef.

Q. And if these cans were opened in a hot climate and had not been cooled, would that damage them?

A. Nothing in the least; only affect the appearance.

By Dr. Conner:

Q. Do you know of any case in which meat has been poisoned by solder going into the can?

A. No, sir; in fact, there is not any solder that can get into the can.

Q. In soldering the cans is it not possible that solder might drop in?

A. No, sir, it is not possible. We have never discovered a case of the kind, and really I don't think it is possible.

By General Wilson:

Q. Have you or do you ever place upon your cans the dates upon which you prepare them?

A. No, sir.

By Colonel DENBY:

Q. Have you anything else that you would like to state yourself about which I have failed to ask you?

A. No, sir.

WASHINGTON, D. C., *January 11, 1899.*

TESTIMONY OF ARTHUR MEEKER.

Mr. ARTHUR MEEKER appeared before the commission, was sworn, and testified as follows:

By Colonel DENBY:

Q. State your name, residence, and occupation.

A. Arthur Meeker; residence, Chicago; I am employed by Armour & Co. as general manager of their dressed-beef and fresh-meat business.

Q. How long have you been employed by Armour & Co.?

A. Fourteen years.

Q. In what capacity?

A. I have been manager of the canned-meat department and general European manager five years. For the past six years manager of the dressed-beef business at home and abroad.

Q. Do you handle refrigerated beef—I mean beef sold in quarters and called refrigerated beef?

The WITNESS. Does our firm handle it, do you mean?

Colonel DENBY. Yes, sir.

A. Yes, sir.

Q. In large quantities?

A. We ship a little over 7,000,000 pounds a week.

Q. I mean, of course, not tinned beef; the fresh beef.

A. Refrigerated dressed beef.

Q. We have gone over that pretty well with other witnesses, and of course we want to make the matter short. Will you state whether you are familiar with the mode in which Swift & Co. do their business—whether your business is about the same?

A. I am somewhat conversant with their method of doing business; I will not say as thoroughly familiar with their method as with ours.

Q. But I wanted to save the trouble of going fully into refrigerated beef by asking you whether your mode of buying the beef, having it inspected by the Government inspectors on the hoof, and then when it passed the Government inspectors, having the beef slaughtered and split and cut up and inspected by the Government inspectors and tagged and put aboard refrigerator cars and sent abroad—do you do it that way?

A. Yes, sir; precisely.

Q. Have you Government inspectors?

A. Yes, sir; they are on our premises. They make post-mortem examinations.

Q. Tell us whether in all that process—I simply refer to refrigerated beef—whether there are any chemicals used.

A. Absolutely none.

By Dr. CONNER:

Q. Please tell us, sir, whether at any time between the cattle on the hoof until your control over it terminates you make use in any way of any kind of boracic acid or salicylic acid.

A. No, sir.

Q. Or nitrate of potash?

A. No, sir.

Q. And no chemical agent of common salt?

A. No, sir.

Q. And no chemical agent of any kind?

A. No, sir.

Q. Anything into which chemicals enter?

A. No, sir; absolutely the only ingredients that come in contact with the beef is warm water, which is used on the beds in the method of taking the hide off. After the hide is taken off it is washed with cool water.

By Colonel DENBY:

Q. Tell us whether you sell this beef abroad, and to what countries?

A. The refrigerated beef goes abroad. We ship about a million pounds a week.

Q. Where to?

A. Great Britain exclusively.

Q. Don't you send it to the Continent?

A. Not refrigerated beef.

Q. Do you sell to the British Government or individuals?

A. Individuals. We have never had the British Government contract for that kind of meat.

Q. How much is the whole trade per year worth?

A. About \$80,000 a week—\$4,000,000 a year.

Q. As to tinned meat, how much, about, of that do you prepare during the year?

A. I would rather—Mr. Brine or Wardrop will appear for the tinned meat. They are in that department.

Q. Are you manager of the tinned beef?

A. No, sir; dressed beef.

Q. Your cars were sealed just like the others, I presume?

A. Yes, sir.

Q. And you sell this refrigerated meat to hotels?

A. Indirectly. We have 230 branch houses in this country that we operate, each of which has a refrigerator. The beef is shipped from our packing houses in refrigerated cars, iced at icing stations along the way which we operate ourselves.

Q. I want to ask you particularly whether you had any complaints of it from your domestic trade?

A. Generally, no; shipping 7,000,000 pounds of a perishable article each week, I could not say there never had been one complaint on one pound. We can not manage our business that well.

Q. Have these complaints been many or few?

A. Few.

By Captain HOWELL:

Q. You have two Government inspections of cattle; before killing and after killing?

A. Yes, sir; one is conducted on the premises of the stock-yard company and there is an inspector at every scale, and every bullock that goes into the stock yard passes over those scales and they don't become our property until they pass from the scales and are passed to us. Anything that is not right is condemned and tagged and the others then become our property. Our employees take them and drive them to our slaughterhouses and there a post-mortem examination is held on our beds. We have three veterinarians that inspect each bullock as killed.

Q. Who pays these men?

A. The Government.

Q. You don't have anything to do with them?

A. In no way, shape, or form.

Q. What is your knowledge and experience; are they men competent for the position which they occupy?

A. To the best of my knowledge, they are. It would be to our interest to have them so, because this inspection is a very valuable thing to us.

Q. You have not seen any of them neglect their duty?

A. No, sir.

Q. You say you have not anything to do with their pay. They are paid by the Government through Dr. Devoe?

A. In charge of the bureau there.

Q. And they look after their duties?

A. Yes, sir; Dr. Devoe is over frequently—every day.

Q. And they do reject beef whenever they are not good?

A. Every week.

Q. And after they are killed they reject them?

A. Yes, sir; every week. Anything that is rejected is put into tanks and used for fertilizing purposes, and lubricating oils made from the grease.

By General McCook:

Q. Do you know of a man by the name of Powell who has an invention for preserving meats?

A. I have heard of him; I do not know him.

Q. Had your company anything to do with him for the purpose of injecting materials into beef for the purpose of preserving it?

A. He bought some beef of one of our houses in Florida and made some kind of a process with it—I think two cattle. That is as far as our connection with it existed.

Q. That was done in Florida?

A. Yes, sir.

Q. Not in any one of your slaughterhouses?

A. Yes, sir.

By Captain HOWELL:

Q. You hadn't anything to do with it except sell him the beef?

A. That is right.

Colonel DENBY. How many camps did you supply during the war?

The WITNESS (referring to memorandum). Shall I give the names or number?

Colonel DENBY. Better give the names.

A. Jacksonville, Tampa, Key West, Port Tampa, Lakeland, and Fernandina. These were Florida camps. We supplied Chickamauga a portion of the time before their regular, permanent contract was let. We supplied Savannah, Camp Wikoff, Camp Meade, Camp Alger, and State camps—Camp Black, at Hempstead, Long Island; Columbus, Ohio, and Springfield, Ill. We also supplied several hundred thousand pounds to the Navy.

Q. Refrigerated beef or canned beef?

A. Refrigerated beef, I am speaking of. Canned beef was also supplied to these camps.

Q. How long a time have you supplied the Government with refrigerated meat?

A. Fifteen years. We have supplied the Government at various permanent barracks—Plattsburg Barracks, Fort Niagara, West Point, Fort Sheridan, and Fortress Monroe.

Q. Have you ever had any complaints?

A. Never.

Q. You sell this meat to the commissaries, I suppose?

A. Yes, sir.

Q. Have they ever complained about it in any way?

A. In no way, shape, or form. On the contrary, I have letters here from the commissaries we supplied during the late war. Some were unsolicited testimonials dated back as far as September, and each and every one praises our service very highly.

(Nine letters filed here by witness as part of his testimony and marked "Exhibit A. M. No. 1, January 11, 1899.")

By General McCook:

Q. I would like to ask if there is any difference between the quality or proportion of fresh meat prepared for the Navy and the Army; is there any difference between them in the preparation?

A. None whatever. The Navy bought some beef that was frozen solid, for the reason that it might not be delivered for a long period. In a trip around from New York to Manila they packed refrigerated beef on hand that had been frozen solid.

Q. Did you furnish the *Celtic* with fresh beef?

A. I do not recollect.

Q. She is the boat that accompanied the *Oregon*.

A. No, sir; we did not furnish her. No, sir; we did not get that contract. They are all let by competitive bidding, and I recall that we didn't get that.

Q. Is there any difference in the quality of the meat?

A. None whatever.

Q. Only some is frozen?

A. Yes, sir.

By Captain HOWELL:

Q. What is the difference between frozen meat and refrigerated meat?

A. It is far better to use it refrigerated than frozen. In the event of a long voyage, like six months, of course refrigerated beef is impossible, but it is very much better to use it refrigerated than frozen, if possible.

Q. When did you first hear of embalmed beef; do you know anything about any people using what is known as embalmed beef?

A. I read the expression first in General Miles's interview.

Q. Never heard of it before?

A. Never. There is no necessity for doing anything of that sort. Refrigeration is absolutely sufficient. There is no reason for going to the expense of trying anything of that sort. We ship beef to England thirty days before use, and it sells well in competition with home-slaughtered beef.

By General McCook:

Q. There is no use for doing it?

A. None whatever.

By Captain HOWELL:

Q. It would be very easily detected?

A. Very. Our total business—we sell over four and a quarter million head of live stock—cattle, sheep, hogs, and calves.

Q. How many cattle?

A. Seven hundred and fifty thousand cattle.

Q. That is the record of the Chicago house alone?

A. That is the Chicago house and Omaha.

EXHIBIT A. M. NO. 1, JANUARY 11, 1899.

PURCHASING AND DEPOT COMMISSARY OF SUBSISTENCE, U. S. ARMY,
*Savannah, Ga., January 5, 1899.*ARMOUR & Co., *Chicago, Ill.*

GENTLEMEN: During the past six months ending December 31, 1898, you have supplied fresh beef under contract to the troops at Jacksonville, Fla., and Savannah, Ga. At the former city there were 31,000 men, at the latter nearly 20,000; in addition, your beef supplied all transports leaving this port.

The high reputation of your firm was maintained in the filling of your contract. For a long time you had to supply 37,000 pounds daily, in the warmest and most trying climate in this country. The beef shipped from your house for the troops was as fine beef as was ever supplied to any troops, as observed during a service of eighteen years in the Army. I could not too highly indorse the quality as well as the manner of handling your beef at Savannah, Ga., both for the troops and for the transports, for which I extend to you the thanks of this office.

With regard to the canned roast beef, I supplied 31,000 troops in their movements by rail with this beef, with instructions to the regimental commissaries to report to me if they found any objectionable features about it. No complaints were made. On one occasion I inspected the roast beef I had on hand, destroying 100 pounds of it in making the examination. I found the quality to be excellent. In all cases where roast beef was issued I supplied salt, and I imagine the flatness of taste reported was due to the want of salt. Again, canned roast beef will spoil like any other canned food. There will be a can here and there found to be spoiled just the same as among tomatoes, beans, peas, apples, etc. I always took the precaution of examining every can before issuing.

Respectfully,

G. W. RUTHERS,
*Major and Commissary of Subsistence,
Depot Commissary at Jacksonville, Fla., and Savannah, Ga.*

WASHINGTON, November 12, 1898.

Mr. W. O. HOWENSTEIN, *Washington, D. C.*

DEAR MR. HOWENSTEIN: As I may not see you again before leaving for my new station, San Juan de Porto Rico, I desire to express my appreciation of the uniform courtesy shown by you as Armour & Co.'s manager while supplying the troops at Camp Alger with fresh meat during the past summer. To supply 25,000 men daily with fresh meat over a single-track branch road was no small task, and yet you did it successfully and in a way that made it a pleasure to deal with your firm.

Trusting that our paths may cross again at no distant date, I am,

Very sincerely, yours,

JOHN LITTLE,
Major, U. S. Army, Purchasing Commissary.

OFFICE DEPOT COMMISSARY,
Camp George G. Meade, Pa., November 17, 1898.

Mr. E. C. CALKINS,

Armour & Co., 128 North Delaware Avenue, Philadelphia, Pa.

SIR: I have the honor to notify you of the evacuation of this camp by the Second Army Corps and the early closing of this depot.

It would not be doing justice to my own feelings did I fail to acknowledge the efficient and satisfactory service of Armour & Co. in supplying the troops of this camp with fresh beef during the past two months. Not once has the supply of beef failed, the quality of beef has been all that could be desired, while you have exceeded the terms of your contract in furnishing two, instead of one, men to

handle the beef in cars. Thanks are due you for so promptly and ungrudgingly meeting all my requests tending to the improvement of the service during the period mentioned.

It affords me pleasure to express my satisfaction with William Braddock, your representative at the depot for two months. He has never failed to perform his duties intelligently and thoroughly, and while he has carefully watched the interests of his employers, he has done so in a way that has not given offense, but rather has tended to popularize your firm and gain friends for himself. I can not speak in too high terms of his fidelity, energy, and good judgment while here. The lugger, Joseph Ragan, has also in every respect given satisfaction.

With assurance of my personal esteem, I am, very respectfully,

FREDERICK W. HYDE,
Captain and Depot Commissary.

NEW YORK CITY, *January 4, 1899.*

ARMOUR & Co., *New York.*

GENTLEMEN: In reference to the fresh beef delivered by you at Camp Wikoff, under your contracts for two months, commencing September 12, 1898, I take pleasure in stating that, so far as I know, the service and quality of the beef furnished was entirely satisfactory to the troops. General Weston, the chief commissary at that camp, informs me that the beef was good.

Of the beef furnished by you for transports, I have never had any adverse reports.

Very respectfully,

C. A. WOODRUFF,
Colonel and Assistant Commissary-General of Subsistence.

NEW YORK, *January 5, 1899.*

THOS. I. CONNERS, *care Armour & Co.*

DEAR SIR: The fresh meats and provisions which I purchased from you for the troops at Camp Black were of the best quality and received in first-class condition. I had no cause for complaint at any time, but on the contrary was often complimented upon the excellent quality of the beef and other provisions furnished by your company.

Yours, very truly,

DAVID P. ARNOLD,
Major and Commissary, Camp Black.

HUNTSVILLE, ALA., *January 9, 1899.*

ARMOUR & Co., *Chicago, Ill.*

GENTLEMEN: It gives me pleasure to inform you that during my service as commissary at Lakeland, Fla., in June and July last, the beef delivered by you for use by the United States troops there was of uniformly excellent quality, always in good condition, and delivered promptly and regularly, carrying out fully the terms of your contract.

Very respectfully,

H. B. DIXON,
Second Lieutenant, Tenth Cavalry.

OFFICE ASSISTANT TO PURCHASING AND DEPOT COMMISSARY,

Huntsville, Ala., January 9, 1899.

ARMOUR & Co., *Chicago, Ill.*

GENTLEMEN: Replying to your query, through Mr. Edwards, as to quality and condition of fresh beef delivered by you to the United States troops at Fernandina,

Fla., during the month of August, 1898, I have to state that I found all fresh beef delivered at Fernandina, while I was in charge as chief commissary at that point, prime as to quality and condition with possibly one exception, which was speedily rectified on my calling the attention of your agent to it. The delivery was always prompt.

Regarding the canned roast beef, I am not competent to judge, as I am not aware that any was used there.

Respectfully,

E. S. GARNETT,
Major and Commissary of Subsistence, U. S. Volunteers.

OFFICE DEPOT COMMISSARY, FOURTH ARMY CORPS,
Huntsville, Ala., January 10, 1899.

Mr. L. F. EDWARDS,

Manager for Armour & Co., Jacksonville, Fla.

SIR: Your favor of the 9th instant duly received and contents noted. In reply to your inquiries would state:

First, that the fresh beef delivered to the troops at Fernandina, Fla., by the Armour Company, represented by you, was of excellent quality and always in good condition, complying with the terms of the contract.

Second, the service of your company in delivery, etc., was prompt, courteous, and met all the requirements of the troops in camp.

Third, no canned roast beef was issued by me to the troops at Fernandina, Fla., and to the best of my knowledge none was issued to them while in camp there.

Thanking you for the faithfulness with which your contract was performed, thus avoiding friction,

I remain, respectfully,

R. W. THOMPSON, Jr.,
Captain and Commissary of Subsistence of Volunteers, Depot Commissary.

OFFICE PURCHASING COMMISSARY, U. S. ARMY,
ARMY BUILDING, 39 WHITEHALL STREET,
New York City, January 6, 1899.

Mr. H. RAPHAEL,

Manager, Armour & Co., New York.

DEAR SIR: Replying to your request for information in regard to the canned roast beef furnished the Subsistence Department through this office by your company, I have to say that it is a rule of this office to not indorse the goods of any particular house. As a mere statement of fact, will say that during May and June, 1898, this office purchased a large amount of this article from you, and no complaints in relation thereto have been received at this office. I tested a can on the 3d instant, which was returned to me from an abandoned camp, and it was in excellent condition, and I used it to prepare a very palatable stew.

Very respectfully,

C. A. WOODRUFF,
Colonel and Assistant Commissary-General of Subsistence, U. S. Army.

WASHINGTON, D. C., *January 11, 1899.*

TESTIMONY OF WILLIAM T. B. WARDROP—Recalled.

Mr. WILLIAM T. B. WARDROP, having been recalled, testified as follows:

By Colonel DENBY:

Q. You are the same witness who testified in Chicago? You were sworn then, and now you are recalled?

A. Yes, sir.

Q. I find we have your testimony here, Mr. Wardrop, and it is entirely unnecessary to duplicate it, and I will only ask you on one or two questions as to the use of chemicals in your meat. In preparing this tin do you use any acid of any kind?

A. None whatever.

Q. The testimony you gave in Chicago is correct?

A. It is, exactly.

Q. And it is the same testimony you would give here if we examined you?

A. Exactly.

Q. If you want to add anything, you may state to what countries of the world you sold your beef. You say here generally, but you can specify it.

A. We sold our canned meats all over the world; briefly, Great Britain and Ireland, France, Germany, Belgium, Holland, Sweden and Norway, South America, including Brazil; South Africa, including the Transvaal; China and Japan, and Australia.

Q. How about India?

A. That is used by the British Government in India.

Q. What governments did you sell to as governments?

A. The British and French as Governments.

Q. How many did they buy?

A. The French have bought 25,000,000 pounds.

Q. And the English?

A. They have bought about the same amount.

Q. You mean annually or altogether?

A. Altogether.

By Dr. CONNER:

Q. In testifying at Chicago you spoke of the fact that the soldering might not have been properly done, and therefore air would enter and decomposition would take place.

A. That is what we term a "sweller."

Q. Do you know of any case in which the solder, in the soldering process, has gotten inside the can and given rise to trouble?

A. No, sir; we do not use solder inside the can at all.

Q. Is it possible in the process you employ that the solder can get inside of the can and come in contact with the meat?

A. It is impossible.

Q. I understand your answer to the question of Colonel Denby, put to you just now, that there is no use made in your house—is there or not any use made in your house by your firm of boracic acid, salicylic acid, nitrate of potash, common salt, or any chemical preparation whatsoever, known or secret, to effect the preservation of your meats?

A. None whatever.

Q. Not used for any purpose or in any amounts?

A. No, sir.

By Captain HOWELL:

Q. Has any of this meat sold to foreign governments ever been condemned and sent back to you as improper food?

A. We have never had a complaint in that connection. I would like to supplement my statement, and that is, that the Australian product, which is put up in the same manner as ours, by the Appert system, invented in 1809—they export to the London market about 16,000,000 pounds of roast and corned beef, 50 per cent roast and 50 per cent corned, and this is approximately for the last three years, and out of that amount of beef the British Government has been buying in the neighborhood of 3,000,000 pounds annually for the last three years, 50 per cent of both.

My object in this is to show that both systems are used, and it has proven satisfactory. There is only one way of canning the meat.

Q. Is there anything else you want to state, anything you did not state in Chicago?

A. I do not think there is anything else.

WASHINGTON, D. C., *January 11, 1899.*

TESTIMONY OF T. J. CONNERS.

Mr. T. J. CONNERS appeared before the commission, was sworn, and testified as follows:

By Colonel DENBY:

Q. State your name, residence, and occupation.

A. T. J. Connors; New York; general eastern manager for Armour & Co.

Q. How long have you held that position?

A. Ten years.

Q. During that time what have been your duties?

A. I have had general supervision of the eastern business of Armour & Co.

Q. What contracts have you made, if any, with the Government of the United States?

A. I have made contracts at Camp Black, which is located at Hempstead, N. Y.; Camp Alger, at Washington, and Camp Meade, at Harrisburg.

Q. For the supply of what?

A. Refrigerated beef.

Q. Do you include tinned beef in that?

A. No, sir.

Q. Just refrigerated?

A. Yes, sir.

Q. Can you state what quantities you supplied at these various camps?

A. I can, approximately.

Q. That will do.

A. At Camp Black we furnished them for about six weeks an average of 15,000 to 18,000 pounds a week. At Camp Alger, at Washington, we furnished on an average of 65,000 pounds per week, and Camp Meade 25,000 pounds per week.

Q. Did you furnish any at Montauk?

A. We did, but that did not come under my supervision; that is, I was away during the time that was being furnished.

Q. In the aggregate, do you know how much it would all amount to, furnished during the war?

A. I did not figure the average in dollars and cents, but the average beef was about 18 cents a pound.

Q. About the number of pounds?

A. The stenographer has it already.

Q. For each camp?

A. Yes, sir.

Q. You didn't furnish the total?

A. No, sir.

Q. Did you have any complaints from the Government?

A. None whatever. On the contrary, we received compliments on all of it from the local commissaries.

Q. Do you know about the preparation of the beef?

A. Yes; I had charge of the beef business in Chicago four years prior to coming East.

Q. Can you tell us whether you used any chemicals?

A. Yes, sir.

Q. Never did?

A. Never did.

By Dr. CONNER:

Q. Did you use boracic acid?

A. No, sir.

Q. Salicylic acid?

A. No, sir.

Q. Nitrate of potash?

A. No, sir.

Q. Any chemical of any kind; common salt?

A. Nothing except water.

Q. That covers all meat from the hoof to the consumer?

A. Yes, sir.

Q. When did you first hear of embalmed beef and injected meat?

A. When we first started out in the dressed-beef business. Our opponents, the wholesale meat dealers in the East, raised a cry with regard to our beef being embalmed. That was the general complaint they made about it, and they have never been able to verify it.

Q. Was any investigation made at the time?

A. No, sir. The only result we have is that the majority of them are out of business to-day and we are doing the business.

Q. Were there any complaints of such a nature that legal proceedings might have been had if you had chosen to take them?

A. No, sir; it was simply general gossip among the trade.

Q. There was no definite specific charge at any time?

A. No, sir. The only specific charge I ever heard made was made by General Miles. The other was gossip, that it was embalmed beef, for the reason ours was refrigerated and others never had been.

By Governor WOODBURY:

Q. Did that grow out of the fact of the suspicion that beef could not be kept that length of time unless it was preserved in some way?

A. I think it grew out of chiefly the fact that they were ignorant of our method.

WASHINGTON, D. C., *January 11, 1899.*

TESTIMONY OF GEORGE J. BRINE.

Mr. GEORGE J. BRINE appeared before the commission, was sworn, and testified as follows:

By Colonel DENBY:

Q. State your name, residence, and occupation.

A. George J. Brine; residence, Chicago. I am in the employ of Armour & Co.

Q. How long have you been in their employment and where have you been located?

A. I first went with Armour & Co. in 1879. I was with them about six years then and have been about five years with them from this date back. I have been located entirely in Chicago.

Q. Were you employed in the packing house, the slaughtering house, or where?

A. No, sir; I was employed in the main office when I first went with them in the city, but I had charge of canned goods at that time.

Q. Had you any charge of the refrigerated beef?

A. None whatever.

Q. Will you tell us whether in your process you used any chemicals?

A. None whatever.

Q. Boracic acid?

A. None.

Q. Salicylic acid?

A. None.

Q. Nitrate of potash?

A. No, sir.

Q. No other?

A. None whatever.

Q. When did you first hear it charged that your meat was chemically doctored, or that any tinned beef was chemically doctored or any refrigerated beef?

A. I never heard anything of it specifically stated until the testimony was given either to this commission or in an interview with an official of the Government some month or two months ago.

By Captain HOWELL:

Q. Just state who it was.

A. General Miles; an alleged interview with General Miles was published.

Q. What branch were you in from 1879 to 1884?

A. Selling and managing the disposition of canned goods.

Q. Can you tell us the quantities of canned meat that you sold, and where you sold them?

A. No, sir; I did not come prepared for that, and it is so long ago I can not remember. The business was not as large at that time. It was at the inception, almost, of the business of Armour & Co.

Q. Do you know in recent years?

A. No, sir; not the figures; I do not know. I have very little connection with it now. My business now brings me in contact with all the departments. I am in what is called the executive-department house now, and I naturally come in contact with every department of the house, and am more or less familiar with the extent of the business without being able to give statistical information.

Q. What is the amount of business?

A. I would say, in round numbers, over \$150,000,000 a year of Armour & Co.

Q. What proportion of that would be tinned meat, and what refrigerated?

A. I should say that the tinned—I can not give any estimate of the other—there are a great many departments, and I do not know what the refrigerated beef would be, but I should estimate the canned goods department at between five and six millions a year.

Q. Is there anything else you have to state?

A. If it is proper to say, I received from Dr. Salmon, of the Department of Agriculture, yesterday, a letter with reference to that department of Armour & Co. in Chicago, which I would be glad to read.

(Witness here files copy of original letter as part of his testimony, marked "Exhibit G. J. B., No. 1, January 11, 1890.")

By Captain HOWELL:

Q. Do you know that the facts as pertain to Armour & Co., as stated in that letter, are true?

A. I do, sir, of my own personal knowledge.

By Colonel DENBY:

Q. Now, after his inspection, do you know whether there is anything deleterious, or anything, injected into it?

A. Absolutely, unequivocally, and without qualification, nothing. That is as much as I can say.

Q. Is there anything else you would like to state?

A. Nothing that I would perhaps be allowed to state. I have been in communication with Secretary Wilson the past day or two, and with experiment professors in the experiment stations—Dr. Atwater. Dr. Atwater is, without doubt, the most eminent food expert in the United States.

Q. Where does he live?

A. Middletown, Conn.; and he was yesterday here. He spent five years, I think he told me, in Germany, and became acquainted with the higher Government officials and other parties—chemists, hygienists, and others—in Germany. He was over there in the employ of the Government for the purpose of making chemical investigations of food, and there was a feature alluded to by him of the canned-goods products of the country which I think is a very important one, and that is, the practical impossibility of extracting the nutritives by chemical process—the Appert process—from the food, even if one desired to do it. The coagulation of the albumen shrinks the meat 40 per cent, and the remainder—60 per cent—retains the protein and nutriment that would be in 100 pounds prior to the boiling; so that Dr. Atwater unequivocally states that the canned meats are not only equal to but far superior to any fresh meat in a nutritive way.

Q. Pound for pound, of course?

A. Yes, sir. He has exhaustively gone into the subject.

By Captain HOWELL:

Q. Some complaints have come, I suppose from people that do not understand it, that this roast beef is the residue of the beef that "extract of beef" has been made from.

A. I have seen that somewhere. It is untrue.

Q. Not true?

A. Not true.

Q. You take nothing from the beef before you pack it, except you take the residue when you boil it?

A. Nothing whatever.

Q. It is pure, good meat?

A. Yes, sir; and we could not do it if we wanted to, nor can anybody. There are scientific limitations to the denuding of the meat of its nutritive, and the consumer is protected independently of the disposition of the manufacturer.

By Colonel DENBY:

Q. Do you want to state anything further, Mr. Brine?

A. Nothing whatever.

EXHIBIT G. J. B. NO. 1, JANUARY 11, 1899.

JANUARY 10, 1899.

Messrs. ARMOUR & Co., *Chicago, Ill.*

GENTLEMEN: Referring to a conversation held this morning with your Mr. Brine, and to certain questions submitted to me in reference to the meat inspection of this Bureau at your packing house, I would make the following statement:

First. All cattle slaughtered at your packing house at Chicago are inspected by the inspectors of this Bureau before slaughter, and again at the time the carcass is dressed, and all the edible meat products of your packing house must be made from cattle and carcasses so inspected.

Second. This inspection is made to ascertain if the animal is free from disease at the time of slaughter, and the meat sound and wholesome and fit for human food.

Third. While the method of preserving meat does not come under the jurisdiction of this Department, I may say that I have never heard of any objectionable methods being used by your house.

Fourth. The inspectors of this Bureau have free access to your abattoir and packing house, and are instructed to remain there at all hours while the killing operations are in progress.

Fifth. All canned meats put up at your establishment are the products of animals that have been inspected and passed upon by the inspectors of this Bureau, and I have every reason to believe that all such product is from animals free from disease, and that the meat is sound and wholesome at the time of inspection.

Very respectfully,

D. E. SALMON, *Chief of Bureau.*

WASHINGTON, D. C., *January 11, 1899.*

TESTIMONY OF MISS JEANNETTE JENNINGS.

Miss JEANNETTE JENNINGS, having no objection to being sworn, was thereupon duly sworn by the recorder, and testified as follows:

By Dr. CONNER:

Q. Will you be kind enough to give us your name, occupation, and what duties, if any, you had in connection with the Army during the war?

A. Jeannette Jennings; newspaper correspondent. My connection with the Army was in going to Cuba with Miss Barton on the *State of Texas*. I was one of her party, but not as a trained nurse; but I went with the intention of writing along the line of Red Cross work, which was then understood to be relief work to the Cubans.

Q. We understand, do we, that you were with Miss Barton on the *State of Texas*?

A. Yes, sir; I joined the *State of Texas* at Tampa about the 1st of June.

Q. Will you be kind enough to tell us at what time you reached Cuba—that is, what time you landed—and what duties, if any, you were occupied with after you landed there?

A. We reached Cuba on the morning of the 25th of June; that is, our ship sailed in among the ships of Admiral Sampson's fleet that morning, off Santiago Harbor. As Miss Barton's object was entirely the relief of the Cubans she consulted with Admiral Sampson as soon as possible that morning as to the possibility of landing supplies. The Admiral said we were not then in possession of any part of the country, and it would be impossible to land supplies, but if she would go on to Guantanamo, up 40 miles farther on the coast, which was in possession of our marines under Commander McCalla, that through Commander McCalla communication could be made with the insurgents there, and supplies landed for the hundreds or perhaps thousands of starving women and children who were coming down at that time.

I know there was a misapprehension as to the mission of the *State of Texas*. As late as August Dr. Munson, an assistant surgeon in the Army, stated in a communication to the Surgeon-General, which was printed in all the newspapers, that at Tampa the Red Cross ship *State of Texas* was under telegraphic orders to proceed with General Shafter to his destination; that through Dr. Eagan, a Red Cross surgeon, the ship was turned over to Colonel Pope at Tampa and accepted by Colonel Pope; but, notwithstanding we were under telegraphic orders to sail, we did not reach Siboney until after recruits had been landed and a battle fought and our hospital established and in running order. There was never a moment from the time that the *State of Texas* was chartered by the Cuban Relief Committee in New York and the charter signed by the President of the United

States that the ship was under the authority of the Army, or orders of any kind from the War Department. It was kept especially for Cuban relief, and loaded before it was definitely understood or settled that we really would need a hospital service, so that it was not a hospital ship. We reached Siboney on the 25th, or I should say, acting on Admiral Sampson's advice, we proceeded to Guantanamo Bay, and of course passed Siboney and Daiquiri, where our troops were being landed. They had not landed, as Dr. Munson said. The landing began on Wednesday, the 22d. We were there on Saturday, the 25th, and for a number of days after troops were being landed there from morning until night, and all the reenforcements landed after we arrived.

Q. Were you occupied with the care of the sick at all while you were on land?

A. Yes, sir.

Q. Where and for what time?

A. I was going to say this: As quickly as possible we went to Guantanamo, and the following day a message came to Miss Barton saying that our soldiers back of Siboney were in great need of help in the hospital, and she at once ordered the ship back, and we went back that same day.

Q. Do you know who that telegram came from?

A. It was not a telegram. It was simply a verbal statement made by a New York newspaper reporter, who came on our ship on Sunday, the day after the battle. But we went back at once, arriving in the evening, and Miss Barton sent ashore to ascertain if this was true, and found that it was, and the next morning the first supplies landed from our ship were sent over to the building that they called the hospital, where there were 75, perhaps more, soldiers sick, lying on the floor with no beds and no food except army rations.

Q. Were you on duty at that hospital for any length of time?

A. Miss Barton allowed me to go on shore, although not a trained nurse. There were five trained nurses with the ship and three surgeons. I did not go over in the morning with that party, not being a Red Cross nurse. In the afternoon she allowed me to go on shore, and what I state is of course from my own knowledge. I went to this building and saw these men myself. I went and talked with Dr. La Garde, who was then on duty. This was on the 27th of June. The party who went over in the morning with supplies—bedclothing, food, and that sort of thing that could be carried over in two boats, the surgeons and nurses going in the third one—went to this hospital, it may be called, with the supplies and offered them. Dr. La Garde said he needed the help and would be glad to have the supplies. He had said so the night before, but it seems when the party went there the following morning that he happened to be out, and an assistant was present who said he did not need any help. However, they left the supplies in a pile on the floor. Our men were still lying around on the floor in their uniforms, and they went on to the Cuban hospital, a little way farther on, where their services were accepted at once, and they went to work and cleaned the place and put it in very comfortable order and worked there two days. You understand that all had to live on the ship and came over there at morning and back at night. We went over in the morning and came back at night, and worked all day. In the meantime there was no authority for the Red Cross to do anything for our soldiers, and as it must be subordinate to the Army and work under the Army, we could do nothing; but at the end of the second day Dr. La Garde, who had, I think, been up near the front, came down and saw the situation, and he at once wrote a letter to Miss Barton and asked for the services of the Red Cross. He asked Dr. Lesser, the chief surgeon of the Red Cross, to join him in securing a better building for our soldiers, and he did so, and Dr. Lesser and the five trained nurses were put in charge of this hospital, which was very much better and more comfortable—made so by the supplies constantly coming over from our ships—so that the hospital with the Red Cross flag over it and in charge

of the Red Cross surgeon and the five nurses was well established by the 30th of June—well established and plenty of supplies when the attack was made on Santiago the 1st of July.

Q. For what length of time, madam, did you remain at this hospital or on duty with the Red Cross officers?

A. I went over and back as I could at first. The first day I was not there. What we call the first day was the day when the wounded began to come down; but I went there on Saturday morning early and worked all that day and all that night in order to relieve some of the others, and Saturday night had to go over to the ship to get something to eat, as there was no way to get anything, except a cup of coffee or something like that. So my duty was, on Saturday, the 2d of July, that day and all that night until the next morning; but to give you an idea (I don't know as I ought to state this) of how much ought to have been done, and to show that the forces were inadequate at that time, I will say that there were only five women trained nurses and a few surgeons to attend about 500 wounded who were down there by that Saturday night. The second day a man who didn't seem to be a nurse at all helped the best he could. Every man, newspaper correspondents, everybody that could do anything—it was no question of trained services at all, only a question of doing what you could. I stayed Saturday night, all night, in a little building that we called the Red Cross Hospital, to distinguish it from the tents that were just across the way, the width of this room, perhaps, where the wounded were. They came down and there was no place for them except these tents that had been occupied by some troops before they went to the front. They spread hay on the ground and the wounded lay there. One of the tents was taken for an operating room. It had eight tables, I think. Our surgeons were asked by Dr. La Garde to come right in, and they all worked together, and nobody could ever tell, I think, how much they did. It was such wonderful work, and they did it so well, the men and women, all of them.

The first day that he went there, the 27th, I went to see Dr. La Garde about the condition of our men on the floor, with no beds or anything of that kind. I asked him if nothing was on the transports—if they had brought nothing down for the hospitals. He said, undoubtedly there were supplies on the transports lying very near the shore, but they had no way of getting them on shore. He said, "The Navy has all the transports and the Army has nothing. We can not get our supplies on shore. I can not beg with the Navy to transport these things." We had taken up from the hold of the *Texas* about 100 woven-wire cots to keep our men off the floor. We had no way to get them over except our small boats. I had applied to Dr. La Garde to get them over some way, and then he said he could not beg with the Navy, and the Army had no way of landing those things, and it was afterwards that I went down to the shore and talked to General Breckinridge, and went over it all. He knew all about it. They said there didn't seem to be any way to land things. The one thing to do was to get our troops to the front with sufficient equipment to fight. They all said that nobody seemed to think of what was coming after, and there was no preparation for the wounded. However, Miss Barton got those cots ashore herself on our small boats, and I want to say that every day but two, possibly three, our ship was sent to Jamaica for ice, and that is the only exception from the 27th of June until the 17th of July when our ship went into Santiago and unloaded. Supplies were landed every day for the hospital and the Cubans from the *State of Texas* in the small boats.

Q. How long, please, were you on duty, assisting in the hospital work, after the 2d or 3d of July that you speak of?

A. I do not know the exact time. I would go occasionally to relieve the others.

Q. At what time did you leave Cuba?

A. On the 14th of July.

Q. On what vessel?

A. The *Seneca*.

Q. Will you be kind enough to tell us what condition the *Seneca* was in as you went on board and the condition of the men—not later, but at the time?

A. I went on board late in the afternoon of the 13th, as the captain had notified me that he thought they might sail that evening. I had asked Dr. La Garde's permission to go up as a nurse, and he sent me over with a little scrap of paper as a pass, as no one could go on board without permission. I did not know there was a passenger on board the ship. The *Seneca* was very near our ship. We were lying all about there, floating. There was no anchorage. The *Seneca* was going up with a lot of wounded—that is the way it was expressed—and I made inquiries as to whether there were any nurses and how they were going, and I found there were none. Almost all the wounded at that time had been taken from the shore and put on transports to get them away from the infection of the yellow fever, so there was really very little to do on shore at that time and nothing we could do. My intention was to go up and back again if necessary.

As soon as I had permission from Dr. La Garde I notified the captain, and our captain sent me over. This was Wednesday, late in the afternoon, and he expected to sail that night; and I found after I got on board a number of passengers, among them foreign attachés, officers who were coming up as passengers, and also some members of the press, newspaper correspondents, quite enough to fill up all the accommodations that the *Seneca* had for first-class passengers. I did not understand, of course, what the arrangements were for the sick and wounded. I knew nothing about it, but supposed that the ship would have something to do with taking care of them. I went to the captain's room and talked with him about it—Captain Decker. He told me that evening that his ship was overcrowded—very much overcrowded—and that he felt extremely anxious because he feared yellow fever would break out before he reached the States. He said that he was helpless so long as a man came with a pass that was authorized by an officer of the Army—the proper authority I suppose—he must go on board; but he did not take anybody on board without a pass. He had simply to sail his ship and to furnish the passengers with their meals, for which they paid a stated price; that he had absolutely nothing to do with the care of the privates or sick or wounded—nothing at all—and that he had no accommodations for sick and wounded; that his ship was not clean; that it was not fit for a hospital ship; that it had never been inspected. He told me—and I will use his words—that not a soul had been on board to inspect his ship. Then I began to inquire and ask about what these men were going to eat—the sick and wounded—what there was for them.

Q. Were they on board at the time?

A. Yes, sir; and some had been on board two days waiting for orders.

Q. Do you know how many?

A. I know 42 were sent over from the hospital ship *Relief*, wounded. I understood 17 sick men came from the *Yale*, recently arrived, and who had never been on shore. They were ill when it arrived, and transferred direct to the *Seneca*. Some were typhoid fever cases, developed while coming from the north. A few were from the shore, possibly. Altogether there must have been 100 that might be considered as requiring care as sick and wounded. Then there were a large number of convalescents able to walk about, but not able to eat anything. Simply in that condition where they were down, but not able to eat the rations. There was a young surgeon, whose time had expired—I am sorry I can not remember the name—it was not his business to do it, but he simply took it upon himself to do all he could. He came to me when he found I was going up as a nurse and told me of the lack of everything. He said, "Those men have not a knife, spoon, cup, or plate, or anything, we may say," and the captain told him he had no way to provide for them; that he had more than he could do to provide the table for the

passengers. There was one case of Armour's beef extract—I do not know whether that was sent over from the *Relief* or not—but it was on board. There were a few bandages and some quinine. There was nothing else in the way of food, except the army rations, for these men. When I went on board the 42 wounded men were sent over from the *Relief* in nightshirts. They had not a stitch of clothing except the nightshirts they had on, and did not have until they reached New York. Of course, with the lack of accommodations many of them were lying about on the floors, and some of them had mattresses and a few men had some blankets, and in the overcrowded condition of the ship they were lying everywhere around the deck. After talking with the captain that evening I asked him if he would send me back early in the morning to the ship. If I could get over there I knew I could get something that would help us on the way up. Miss Barton was at the front, where she had gone the third time, but after I went over to the *Seneca* it seemed she returned, and the captain said if I would get up early in the morning and be as quick as possible he would send me over, but he was anxious to get away the minute he knew he could go. He was waiting for his destination, and then he was going to get up anchor and go. He sent me over in a boat, and I found Miss Barton had come the night before. I went at once to her room and told her of the situation. She hurried down below, and with the help of the men we got together what we could in the hold. If there had been time I could have had most anything there, of course, but there was only time to get these things, such as malted milk, cereals of various kinds, oatmeal, jellies, and towels, and various things; also knives and forks and spoons, plates and granite ware, and everything of that sort. They were all thrown into an immense bag, and while we were doing that the *Seneca* blew her whistle preparatory to weighing anchor, and we went back; and if we had not got those things I don't know what we would have done. It was a very good thing that we got them.

Q. Will you please tell us what the condition of the men was during the trip north?

A. Some of the men were badly wounded—that is, they were still in that condition to require careful treatment—a condition which caused them a good deal of suffering, because they could not have the proper treatment. There was not a surgical instrument on board the *Seneca*.

Q. Did your observation lead you to think that surgical instruments were required, other than perhaps forceps and scissors?

A. I understand we did not have even those, or a thermometer, until we got to Fortress Monroe. Dr. Hicks, one of the young doctors, sent over and got one. Dr. Hicks and Dr. Bird both told me, separately, that they did not have any instruments. I was astounded, and said, "How could you start on this trip without instruments?" and each one of them told me he had asked for surgical instruments of the *Relief*, and they did not want to start without. Dr. Hicks said the reply to him was that the *Relief* had none to spare, and they sailed without anything. There were men on board that could have been relieved of great suffering if the doctors had had the instruments, so Dr. Hicks said; and I know of the suffering, and I know after those men were taken to Bellevue Hospital they were relieved. One man, I must state, because it was a case that will be very interesting, was wounded here [indicating breast], and could not lie down at all, because he seemed to be unable to breathe, and he acted like a man that was gasping for breath sometimes. I found him down on the lower deck, on a mattress leaning up against the wall. I asked him if he had taken cold coming over, and if that was something new, and he said no, he had been so for several days on the *Relief*. He said, "I told them I could not stand this much longer; I must have some help;" and the doctor said to him, "Don't worry; you are getting along all right." After that man was taken to Bellevue I saw him—about three days after—and he had changed so much and looked so much better that I

asked him what they had been doing. I said I supposed it was because he had got back to God's country. He said probably t at had something to do with it, but it was because they had pumped that bad stuff out of him, and they had operated on him three times within two weeks. The first time they pumped out 114 ounces of fluid. That caused that distress and difficulty in breathing. Dr. Hicks told me he could do nothing with that man, because he had no instruments to do anything with. I had put on a mustard plaster to try to relieve him.

Q. Now in regard to the diet, please, of these men?

A. They had, as I said before, with the exception of the beef extract, only the army ration, until I got supplies from our ship. Then we used a great deal of malted milk, and a great deal of beef tea made from this extract, and gruels and mush and those things, and also whisky to keep up the strength of the men. That seemed to be the idea until we could get them into a hospital, and I kept beef tea going night and day, and also malted milk.

Q. Were the conveniences for cooking on ship such as you needed?

A. No, sir; I had the use of the kitchen down below simply because the captain was so kind. He told me when we started that if there was anything on that ship or anything his men could do to ask him and he would do all he could. He was everywhere about the ship, and I had permission to go to the kitchen, and the men had orders to furnish me everything. The stewards furnished a good many meals without saying a word about it, and fixed the beef tea and various things.

Q. You were able fairly well to provide the diet?

A. Yes, sir; I think, considering all things, and with the aid of the captain, and the supplies I got from Miss Barton, that the men got along in a fairly comfortable way.

Q. Do you remember how many passengers were on board that were paying their way coming north?

A. I could not give the number. There were two tables and they were always full, and more than full.

Q. Was the diet prepared for this table a fairly good one?

A. Yes, sir; I think it would be considered a fairly good one.

Q. Then there were on board the boat ample provisions, if they had been appropriated, for the use of the sick?

A. I do not know how far they would have gone if they had been used for the hundred or more men aside from themselves.

Q. The two tables accommodated 20 or 30?

A. Oh, yes, sir.

Q. Then, if there were abundant provisions for 20 or 30, there was abundant for three times that number of sick?

A. Yes, sir; if used that way. When I say one hundred I do not include all those who could not eat. One by one they would drop off because they were in a condition that they could not eat the army ration, and nothing else was provided.

Q. Therefore, as we understand, there were provisions on board that ship?

A. For the passengers, certainly.

Q. And under what authority, did you know, was that ship sailing; under the authority of the Quartermaster's Department or as a private enterprise?

A. Not at all; it was a Government ship, under the Government. The captain was simply subject to orders from the Government.

Q. Were there any officers on board of high rank?

A. I think not higher than a colonel—Colonel Van Horn.

Q. Of the Eighth Infantry?

A. Yes, sir; and I think he has since died.

Q. Do you know whether there were any blankets on board not in use that could have been appropriated for the use of the sick?

A. I don't think there were.

Q. So far as you know, the men were enabled to get along fairly well, thanks to your care and the supplies you secured, so that they got north without serious detriment; was that so?

A. Yes, sir.

Q. Where did you land first?

A. We were ordered to Fortress Monroe, and reached there Monday after the Thursday we left. But in the meantime the fever cases had become so much worse that there was a feeling on board that some were yellow fever. Quarantine officers came on board, and they must have thought so also, because they said at once that we could not land, and nobody was allowed to leave the ship and go ashore; but we were allowed to get supplies and ice.

Q. To what extent?

A. When we left Siboney we had ice that lasted about two days which we got from the Red Cross ship. That was all the ice we had. When we got to Fortress Monroe we got ice and lemons and oranges, condensed milk, and various things that were sent for.

Q. Did you get a sufficient amount of supplies, so far as you yourself observed, to last until you got to New York?

A. Yes; I think we were very well provided for.

Q. How long were you detained at quarantine at New York?

A. We arrived in the morning, and in the afternoon the wounded were taken off to Bellevue and Swinburne Island, and the passengers and convalescents were taken to Hoffmans Island on the same night; some not until Wednesday.

Q. All of the sick and wounded, then, were off the vessel within twelve or eighteen hours after you reached New York?

A. Yes, sir.

Q. Have you any other statement you would like to make to us with reference to this trip other than that you have already made?

A. Well, if you will allow me, I think I would like to state briefly just a little more about the condition of the ship and where a great many of the badly sick were placed.

By Colonel DENBY:

Q. Did the men improve or get better?

A. I can't say they got better; some got very much worse. They were typhoid-fever cases that were very bad when taken off. No; I do not think they did get better.

Q. Well, they must have gotten better if they didn't die, some of them, didn't they?

A. I don't know. Typhoid fever will run a long time, you know. I think the fact that we kept up their strength so well with whisky—though we had no surgical instruments, the doctor had some good whisky, and he ordered me to go around every day with a glass and a bottle and give them whisky, and I took it myself. I had never before, but I did every day several times, or I am quite sure I could not have kept up.

Q. How many doctors were on board?

A. Two young contract doctors. One was ill almost all the way up—Dr. Bird.

Q. Was it with seasickness?

A. I don't know. I think he was rather debilitated when he started.

Q. How young were they?

A. I don't think over 30. Dr. Hicks, perhaps, was not 30. It left almost everything for him when Dr. Bird gave up.

By Captain HOWELL:

Q. The witness wants to make a statement.

A. I was going to say this: I found, after we started and I began to look about, that some of the very bad cases were down below on what might be called the first or lower deck, where wooden bunks had been made like shelves, and some of the worst cases were down on those shelves, with no mattresses and simply blankets. The first thing was to get those men up into a better place, and as soon as it was known and we began to work to try to get them up the passengers, especially the foreign attachés, gave up their staterooms at once and took pillows and would lie down anywhere. One by one we got them up, so that after two days out we had gotten the worst cases all up but one. The men said, "Don't go down in there; you can't stand it." They had to wash that deck out every day. There was machinery down there, and it was no place for well persons. I came up after an hour with my feet soaked. Bruce Allen was the name of the man. He was a regular. In fact, almost all on board were. He could not stand up; a shell had exploded under his feet; and I went to get him up in a better place, but an entire stranger, a soldier whom he didn't know at all, had taken it upon himself, without a word, to look after this man, and did it so well that Allen said, "I think you had better let me alone; that fellow takes care of me all the time." All I could think of was ugly pens, nothing else; but we left him there because he said he was so much better.

By General McCook:

Q. Did he belong to the Regular Army?

A. Yes, sir; all of those men did.

Q. That is natural enough.

A. There was a mere boy who was in the Sixth Massachusetts, sick with typhoid fever, who came down on the *Yale*. He was delirious and hadn't any clothing. Everything was soiled and there was nothing to put on him. Some man, I think a newspaper correspondent, when he found this boy had nothing to put on, came down with a suit of underwear to put on him, and gave it to him. One of the foreign attachés, Count Monorobaar, found a German, a countryman, and gave him some of his clothes; and so everybody was as kind as possible as soon as they found out how those things were, but they were all down in that place at first where they ought not to have been.

By Dr. CONNER:

Q. These men who came from the *Relief* in their hospital clothing only, did they suffer on the passage north or not?

A. No; I do not think so.

Q. Did they suffer from the cold?

A. No; I don't think so. They were sent over from the *Relief* as convalescents who were walking about and taking care of themselves, so Major Torney said; but they were without any clothing except the nightshirts they had on, and nothing to eat, no table appointments—nothing.

Q. They were all wounded that were sent from the *Relief*?

A. All wounded; yes, sir.

Q. They had lost their blankets before they were sent from the hospital?

A. I suppose so; I don't know. One man said he had an excellent pair of shoes and begged them to give him those, but he never could get them.

Q. Their clothing was so soiled it was possibly destroyed, and could not be kept?

A. No; but if the *Relief* was loaded as it must have been with all kinds of supplies, as the Surgeon-General stated, they must have had clothing—pajamas and such things—that they could have given them, and proper food, and knives, forks, and such things. There was nothing sent with them.

Q. Is there any other statement you would like to make, or to continue this?

A. Well, I wish to emphasize this statement, especially because it has been denied. I was anxious to give my testimony before the commission, not because I have stated anything new, but the statements I made were not any of them a reflection on the *Relief* not doing the duties the ship was intended for, and my statements were denied. Now, I wish to say this in regard to the surgical instruments: Not only that man I told you of, but another man, was in Bellevue Hospital over two months, and Dr. Hicks told me he did not think the man would live until he got North because of his wound, and the pus was forming about the wound, and he said, "I have nothing in the world to relieve that man." He came from the *Relief*, and he was operated on at Bellevue. It was a very serious case; so serious that late in September he was still in Bellevue. There were none of those men convalescents; not one could be called convalescent. When they were taken off the *Seneca* every man had to have help, and some of them were put on stretchers to be carried over to Dr. Doty's ship.

Q. Did you have occasion to visit the *Relief* at any time?

A. No, sir; I was never on board the *Relief*.

Q. I was going to ask you if those men were the least ill of those on board the *Relief*.

A. I know this from the reports made by the *Relief*: That they treated only 265 cases there. They were taken on the *Relief* only for a while, and then taken onto the transports. We sailed on the 14th, and there is this to be said: That there was just the possibility of fresh hostilities, though the surrender had been made, and it could be said, perhaps with not much reason, that the *Relief* would have been unable to take care of them. We sailed on the 14th, and immediately after the surrender; then the *Relief* came up, arriving three days after we did, because she made the trip in about three and a half days and we took seven days. She brought 125 men and she could carry 800 without any discomfort whatever. The *Seneca* was perhaps the first to come up in that condition—without any food—but the *Relief* came up with 125 and left all the other transports with those that she could have carried herself, and it has never been explained, so far as I know, why she did that.

WASHINGTON, D. C., January 12, 1899.

Miss JEANNETTE JENNINGS resumes the stand.

By Colonel DENBY:

Q. If you have anything further to say you may do so, Miss Jennings.

A. There was something I omitted yesterday, but it came back to me clearly, and I think you will consider it important. At first I would like to have—I suppose it don't matter—it should have come in where I spoke of my first day in the hospital (Saturday, the 2d of July), the day after the attack on Santiago. About 6 o'clock in the afternoon I happened to be left entirely alone in what we called the Red Cross Hospital, to distinguish it from the tents across the way where the wounded were. The most of our patients in this little building were sick—we had few wounded—and our nurses had gone to the ship to get their dinner and rest a little bit, and I happened to be the only one left with the patients for all night, to have the help of one man, who was coming from the ship. But just at that moment I was alone and on the porch, where we had three or four wounded men in cots. Dr. La Garde came up with a little scrap of paper in his hand and asked if there was anyone there who could carry it to our ship. It was from General Shafter—a few lines in pencil—an order, but more an appeal to Miss Barton to send food immediately to the front for the wounded in the hospitals there; anything we had—they needed almost everything. I want to say that Dr. La Garde was so distressed over the situation that he could hardly speak. Per-

haps I should not have said it, but I did say, "Has our Government sent 20,000 men down here to fight, with no preparations for the wounded? Where are your hospital supplies? Are they not on the transports here within a half a mile of shore?" He said, "I do not know; I do not know. But I know this: That we need almost everything up there. We need food for our wounded; we need bandages; we need medicines; we need almost everything. Can you get this over to the ship at once?"

Dr. Hubbell, one of our Red Cross party, had been very busy getting supplies from the shore, everything being carried by hand, to this little hospital, where it was stored in a little back place. As soon as he came up I handed him this order or request. In this General Shafter authorized Miss Barton to seize anything in the shape of an army wagon or mule, to load it with supplies, and send it to him. As soon as Dr. Hubbell came out he took this and went to the ships at once. Our men on board were up until midnight getting out the supplies they thought would be most useful; and that evening the wagons were secured to be ready, and in the morning two army wagons were loaded with supplies and started for the front, and Miss Barton, with Dr. and Mrs. Gardner and all but one man, who could not be spared, followed in an army wagon and started for the field hospital with the supplies. That was Sunday morning, the 3d of July. Those were the first supplies we sent up to what we called the "front," but I want it understood that the first supplies landed from our ship for our soldiers, for the hospitals at Siboney, were landed on the 27th of June, before the attack on Santiago, and when there was not anything—I wish to be very particular about this; it is right that I should be—there was not in that old building where our men were lying on the floors in four or five rooms—a very filthy place—there was not a cot, or bed, or vestige of comfort there, and all the cots that were supplied then to our soldiers were taken from our ship. We had, I think, 100 woven-wire cots, and those were the cots, and it was our bedding from that ship, shirts for the men, and everything that could be used to make a hospital comfortable. All those supplies we furnished, and started what could be called a hospital at Siboney, under the authority and at the request of Dr. La Garde; all those things were from our ship, the Red Cross ship, and not from the Medical Department at all. And to be sure that there can be no mistake I want to say that the Red Cross did not and could not take any step on its own authority, but had to wait until there was permission from the Army, and that that came though Dr. La Garde, not, I think, from any authority from Washington, but simply because on the 28th of June it was understood that every man who could carry a gun was to go to the front, and there would be nobody left to take care of these sick men; some of them had been taken off the transport ill. He was made surgeon in charge there, and did not wait a moment to get authority from Washington, or wait for red tape. He at once saw the necessity and asked the Red Cross for aid, and put Dr. Lesser, of the Red Cross, and those five trained nurses in charge there. It was all done by the authority of Dr. La Garde, but it was all made possible by the supplies and readiness of the Red Cross. We all understood that the transports had tons of supplies, but they were not on shore, and there seemed to be no way—as General Breckinridge told me himself, and so did Colonel Humphrey—they had no way of getting them on shore. So I want that to be understood, that the Red Cross did not take a single step without waiting until it was authorized by the Army, and it always worked, as it must do, subordinate to the Army.

By General McCook:

Q. Have you read Dr. La Garde's testimony before this commission?

A. No; I have not. I wish to say that I never met Dr. La Garde but once, and that was the day he came to this hospital with the little order from General

Shafter and gave it to me. But afterwards when I found and knew (as we all knew there) that the effort was made, of course, to get all of the wounded and all of the sick not infected by yellow fever—to get all those on the transports to keep them from infection; so as it really left no wounded there at the hospital it was broken up. In fact, on the 12th and 13th of July the order of General Miles to burn Siboney was put in force, and for two days the houses were burned, one by one, and when we left on the morning of the 14th there was scarcely any building left. What did you ask me?

Q. (Previous question read as follows:) Have you read Dr. La Garde's testimony before this commission?

A. No; I have not. Then afterwards when I found I could not be of any service there, and there was no nurse going on the *Seneca*, I thought I would go. I found I had to get permission to go on board her, and I sent one of our men (Mr. Warner), one of the men who had charge of landing supplies for the Cubans, over to Dr. La Garde to say to him that I would be glad to go up—knowing there was no nurse on board—and to do the best I could for those men, if he would give me permission; and he at once sent back this little note: "Pass Miss Jennings on *Seneca* as a nurse to the *Seneca*. She has not been subjected to yellow-fever influence. La Garde." And, of course, when that came back I at once put my few things together and got ready, and sent word to the captain of the *Seneca* that I would go, and I went on board the night before, as he was expecting orders to sail.

I think someone asked me about the *Seneca*, whether it was a private or Government ship. It was directly under the orders of the Government. The captain had nothing more to say about where she would go than we have here. It was a Government ship for the time; owned by the Government, practically.

(Continuing subject in second paragraph preceding.) He told me he did not allow anyone on board without a pass. He said his ship was under the usual rules before sailing; that she was not allowed to carry above 54 passengers; that she was so crowded that she had about four times that number, and he did not know what would happen, especially on account of the fever cases. So I want to say this: So far as the *Seneca* was concerned the captain was under the orders of the Government. He told me he had simply to sail his ship, and he did not know that night just where he was to go, and he was waiting for orders, he told me, orders from Colonel Humphrey—his sailing orders were from Colonel Humphrey. He spoke of Colonel Humphrey several times in that way, and no other officer, and that night, while talking with him in his cabin, he said, "The moment I get my orders from Colonel Humphrey to know where I am to go I will pull up the anchor and go as fast as possible." While I was talking there with him about the situation of the men I remember very well of Colonel Van Horn; he whom you spoke of yesterday; he was in the cabin at the time and talking with us about the situation. I think Dr. Conner asked me about the highest officer; and, as I remember, Colonel Van Horn must have been the ranking officer. He did not seem to have any more power than the captain to prevent these things I spoke of—evidently had none. Afterwards, I think the second night out, it was extremely rough for a little while, and they were turning the course of the ship, or something, and we thought everything was going to pieces. They had taken the cargo off and the ship was light, and in the saloon where the tables were there were 25 or 30 sleeping there at night. I did, myself. I did not take my clothing off once from the time we started until I took it off at Hoffman's Island. I simply had slept on a seat, and foreign attachés did the same way, sleeping even around there on the floors.

This violent lurching of the ship threw the chairs, which were screwed down, across the ship; they had been screwed down. It came suddenly about 10 o'clock, and there were some officers and men standing and sitting around this table talk-

ing, and Colonel Van Horn was standing up talking, and he was thrown violently across the ship and he caught on the edge of an open door, and he said afterwards that if he had not caught that he would have been thrown overboard, and he fell and was hurt. He never knew—he talked as though it was not serious—but he did not come out the next day. I fear that it was an injury which was a serious thing to the colonel, and that he was not very well afterwards. But when I had been down below and found out just exactly the awful condition of things down there, and that some of our worst cases had been placed down there, I felt so badly that I wanted to talk to somebody there, and I realized that Colonel Van Horn was the highest officer in rank there, and having talked to me, I went to him and spoke of this condition of putting the men on the ship in that way. He was distressed, but he did not seem to have the slightest authority or right to do anything. He seemed as helpless as anybody else, as far as that was concerned, and there was nothing to do, as he said, but simply to go on until we reached port.

I think I should have said this, as speaking of the matter yesterday as I did, he being the highest officer in rank, might be held responsible; but as I understand, the ship sailed by orders of the quartermaster, Colonel Humphrey, and that Colonel Van Horn and no other officer on board had anything to do with it, but they simply went as passengers.

Now, I want to say just a little more about after we got to New York. I think Dr. Conner asked me yesterday if I felt that we got on in a fairly comfortable way through the supplies we had and my care. I do not want to say anything that will be misleading, or that I could do so much on that ship. I did what I could, and probably did help; but after we reached New York I stayed there about ten days, and I went several times to see the wounded at Bellevue; and after it was decided that there was no yellow fever the fever men were taken and sent to Wards Island under the care of Dr. Rafferty. Now, when I went to Fort Hamilton to see the men there, some who had not been well on the ship were there, and when I got to Fort Hamilton I found a whole ward full of fever cases, all from that ship. The only deaths—I think you asked yesterday if there were any deaths—not on that ship, but we had one man who was in the Regular Army, Glantz, who, when I last saw him on the ship, was walking about and I gave him beef tea and malted milk; and this man, so far as I know, was the only man who died, and yet he was able to go away from the ship as a convalescent to Hoffmans Island; and afterwards, the first day I went to Fort Hamilton, he was in bed, and I think he lived a day afterwards. He was then in the last stages of typhoid fever. He had been alongside a young man who had been slightly wounded, and this man Glantz had been delirious and got up at night and broke the glass out of the door, but he was kept there. I said to the steward that I would not leave that ward until they put this man in a private room, and I got him taken away right there.

Now, those men with this fever had not one bit of ice at Fort Hamilton when I got there. I said to the first man I met, "You are in a nice place. You have everything you want here, and will get well." He said, "There is only one thing I want." He was burning up with fever, and he said he wanted ice. I said, "Haven't you had ice?" And he said, "Not a bit." I went to the hospital steward and asked why it was that in New York they could not give these men ice. He said he had ice only for the refrigerator, but not for the patients. I said I wanted to furnish it. When the doctor, Dr. Rafferty, came in and I told him of it he seemed surprised; and I said, "I will go to the Red Cross and arrange to have ice here every day; I have some money friends have sent to me." He said, "Miss Jennings, this is not a pauper institution, and we will furnish the ice. I thought they had it." Then we went over the list of things they needed, and he

allowed me to make out a list and take it to the Red Cross. There were sheets and towels and pillowcases, malted milk and beef extracts, and all those things the doctor said they had not. And I said, "The Red Cross has plenty of those. If you will only allow them they will send them." There were no women nurses there. Had there been I think they would have had these things. Afterwards I wrote to Mrs. Whitelaw Reid about this situation, and some women nurses were sent there. I have told you this to show you that while our Government hospital right there in New York should have had all these things, it did not have until the Red Cross sent them over after I was there.

Q. That was at Fort Hamilton?

A. Yes, sir; a week after the *Seneca* came up. It simply happened that I learned that by calling there.

I said one thing about the *Relief* yesterday. Perhaps I ought to say a little more. I said the hospital ship *Relief* could accommodate 800 comfortably. I got that number from the Assistant Secretary of War, Meiklejohn, after I came to Washington. They had 400 regular beds in their wards, and 700 folding beds and cots, an ice plant, and everything for the comfort of the ship; yet while it had an ice plant the only ice we had to start with on the *Seneca* came from our Red Cross ship and not from the *Relief*. It was Mr. Meiklejohn who knew about the fitting out of the *Relief* at that time, and that she could accommodate 800 at that time, and that she came up (he knew also) after staying there twelve days, and in the twelve days treated just 265. That was the whole number treated, according to their own statement. And afterwards all those transports came with sick and wounded without ice. The *Relief* could have accommodated more with comfort.

WASHINGTON, D. C., *January 11, 1899.*

TESTIMONY OF DR. W. O. ATWATER.

Dr. W. O. ATWATER, having no objection to being sworn, was thereupon duly sworn by the recorder, and testified as follows:

By Dr. CONNER:

Q. Will you be kind enough to give us your name?

A. W. O. Atwater.

Q. And the positions you hold?

A. Professor of chemistry in Wesleyan University, Connecticut, director of the Storrs Agricultural Experiment Station, and special agent of the United States Department of Agriculture in charge of nutrition investigations.

Q. Will you be kind enough to tell us, as the result of your investigations, what the food value of canned meat is, taking the canned roast beef first, and put it in such a way that the commission may understand it as compared with the fresh beef served by a butcher?

A. You put that question in such a way as to oblige me to refer first, specifically to figures. I have here on this sheet of paper (see Appendix A) the results of certain chemical analyses, the most of which were made with specimens of canned meats collected under my direction at Chicago at the time of the World's Fair, and analyzed in my laboratory under the auspices of the Columbian Commission. Most of them, however, are not yet published in detail. These include a number of specimens of canned meats; I see there are four specimens of canned roast beef, a larger number of corned beef, and quite a number of others. I may say that I know of no more complete and accurate data which I could give you than are found in just these figures. Briefly, the amount of nutriment in a pound of such beef (canned roast beef) is considerably larger than the average amount in any ordinary kind of fresh beef which we would find.

Q. Of course, you know perfectly well that it has been charged that this food is not fit for use, being neither nutritious nor palatable, and we are anxious to have your judgment in the matter.

A. There can be no question as to a general answer to be given to such a question as that. I have no hesitation in saying here or anywhere else that the charge is almost as far out of the way as any statement that could be made—thoroughly wrong.

By Captain HOWELL:

Q. You mean it is not so?

A. To say that it is not nutritious, that it lacks any nutritive value as compared with other canned or fresh meat, is utterly wrong.

Q. Will you be kind enough to state for our record what you stated a while ago regarding the extent of the meat industry in the United States?

A. I will submit it in writing, if the commission please.

(See Appendix B.)

By Dr. CONNER:

Q. Do you know, sir, the comparative place of the meat industry in the United States, compared with the grain, lumber, iron, coal, and other industries?

A. I can answer that, sir, only from memory. I may say, however, that during the past three decades the meat industry, as a manufacturing industry, has increased in money value of the annual product until it was, in 1890, above that of the iron and steel or lumber, or even flour and milling products, and was exceeded only by textile products.

Q. Is it true that this industry has increased over 1890, or remains as in 1890, or has decreased in value?

A. My impression, sir, would be that the increase would be a normal one—a consequent growth. I have no statistics to substantiate the impression.

Q. Do you know anything of the methods adopted in the packing houses in the preparation of food stuffs?

A. Not in such a manner as would be desirable for a complete as well as accurate statement to go on record before the commission. In a general way, I do know only by having visited the places and seeing how it was done.

Q. You had occasion to analyze these food products, with a view to determining their constituents, etc.?

A. Yes, sir.

Q. Did you in the course of your examination find cases of chemical agencies not belonging to the flesh?

A. Nothing whatever. I never found, indeed, anything that suggested to me that such things were used in the standard commercial products.

Q. Have you had occasion to examine a sufficient number of specimens to satisfy your own mind that what you have examined is a fair sample of the products put upon the market?

A. In a sense the number would be fairly representative and yet not sufficient to satisfy me entirely. Let me explain. A considerable number of brands of prepared beef that are on the market are put up by each of a large number of houses, mostly American, but some foreign—at least at the World's Fair I found them—and the total number of analyses of these is comparatively small. I find here, for instance, of roast beef for analyses of materials collected in Chicago, and one since collected in Tennessee. Of canned corned beef, eleven were collected at the World's Fair at Chicago, one taken later in Tennessee, and one taken in California. Of boiled beef I have only one, and that a foreign one. And here, as you see, are, perhaps, forty or fifty or more analyses of other kinds and brands. Now, I can see no reason why these, as far as they go, should not be typical and representative. They were selected because they were supposed to be such.

Q. Have you had occasion to examine carefully the canned roast beef, so called, put up by the Armour's, or Libby's, or Morris?

A. There are in this list of analyses some put up by some of those firms.

Q. Can you name those firms?

A. The names are here: Cudahy Canning Company, Omaha; Libby, McNeill & Libby, Chicago; Armour Packing Company, Kansas City. These are canned roast-beef samples—and the Australian Meat Company, of New South Wales. Then, there is one more which I have here, a product purchased in Tennessee, of which, I regret to say, I have not the brand.

Q. In the Libby and Armour products in your examination of them, have you found at any time the presence of introduced chemicals?

A. No, sir.

Q. Would you have discovered chemical agents, such as boric acid, salicylic acid, and nitrate of potash?

A. No, sir; the examination was not made with the purpose of discovering foreign substances, but simply to ascertain the amounts of nutriment.

Q. You have nothing to show the chemical purity?

A. From my own analyses, no.

Q. Do you know of any chemical analyses of these products that would throw light upon the subject?

A. Not of such sort that I could now indicate to you why or by whom or when they were made, nor what were the results.

Q. Do you know, by your own observation or as the result of reading or your studies, whether such chemical agents have been introduced into the canned meats at any time—through the investigation of competent chemists?

A. I do not now recall an individual case in any ordinary commercial article put up by any well-known firm. It is possible that I might, if I were to think the thing over, but I do not now recall any, and nothing has ever occurred in my reading or analyses or conversations with others which would lead me to think of the probability of any considerable amount of such treatment of meats. Allow me, however, to say I have known of some experiments, made in one way or another. I remember one among my earliest experiences in examining these things. But when you ask me whether I have seen or read of analyses or investigations which would imply the occurrence of such substances in the ordinary commercial products to any considerable extent, I could only say, sir, that I have not such information.

Q. As the result of your investigation of canned roast beef, is it or is it not a good food stuff to be issued to troops?

A. I should say a most excellent food stuff.

Q. Is it, or is it not, as found upon the market, in its natural condition, we will say, a palatable article of diet?

A. That reminds me of the old Latin saying, "De gustibus non nil disputandum." It is a matter of taste; that is to say, I don't suppose any ordinary man would regard the ordinary canned meats as possessing any such attractive flavor and aroma as are characteristic of a nicely broiled beefsteak or a nicely cooked piece of roast beef; but that, sir, has its plain chemical reasons, based upon the fact that the processes of preparation are different. On the other hand, my own experience in the use of these things, as they are generally used, and are constantly used in my own family and on my own table, and as I have taken them with me from time to time when out on a hunting or fishing trip, would lead me to judge of their palatability, as I suppose anybody else would judge. They have a very good flavor if you are hungry and if they are properly prepared. But if you were to take a specimen of canned boiled beef, for instance, out of the can and eat it without any flavoring matters or condiments or things of that sort, it would taste very much like a piece of boiled beef which might be cooked in your

kitchen and served on your table for dinner, as ordinarily done all over the country, provided no condiments were put on that. And if you had to eat it day after day and had no other meat but the canned roast beef or corned beef and were without facilities for preparing it for use or condiments to give it flavor it might become very disagreeable.

Q. The nutritive value of the stuff is what? You have stated it is good.

A. Your question I understand to be, What is the nutritive value of the canned beef as compared with fresh beef?

Q. Yes, sir.

A. Pound for pound, the canned meats have a considerably higher value than the fresh meats. The reason is simple. The fresh meat contains a good deal of bone, which is not of a specially nutritive value and is removed in the preparation of canned meat. In the process of canning, the meats are heated, boiled or otherwise, and in that process considerable water is driven out. The water has no nutritive value. In this process of preparation, supposing that to be one of boiling, a very small amount of material is dissolved out of or extracted from the meat. That amount, however, is small. It could not be made large if the manufacturer tried to get out all the material he could. It is a physiological impossibility for him to remove by boiling any large part of the nutriment. That, perhaps, demands a further word of explanation. The materials which he could remove by soaking the meat in water, even if he chopped it up in little pieces and soaked it in cold water, and afterwards warmed that water, as is done in the making of beef tea or meat extract, would remove a very small proportion of the actually nutritive substance. The materials that are taken out for the beef-tea extract represent a very small proportion of the whole, and include very little material which serves the main functions of food, which are mostly to build up the tissues of the body and to repair them as worn out, or furnish energy in the form of muscular power.

Q. Is it true that 50 or 75 per cent of nutriment is taken out in the process of canning meat?

A. I have never become aware of any fact which would lead me to think that it would be a chemical, physiological, or commercial possibility to extract such amounts of material. I could not do it in my laboratory.

Q. You have a table of the analysis of the so-called corned beef?

A. Yes, sir.

Q. What is the nutritive value of the so-called corned beef?

A. The nutritive values of the canned corned and canned roast beef are very near identical. I have here the averages of the results of these analyses of these specimens of corned beef of which I speak. The average percentage of the protein in about a dozen samples was 26.3 per cent. The average in the similar samples of canned roast beef was 26.1. The average per cent of fat in these specimens of corned beef was 19.2 per cent, and in the specimens of roast beef 12.2 per cent, making an average of these particular specimens of corned beef somewhat a trifle higher in nutritive value than the specimens of roast beef, because they contain a somewhat larger proportion of fat. The protein of the two is almost identical.

Q. As the result of your investigation, do you or do you not consider these canned meats, the corned and roast beef, so-called, proper stuff to be issued to troops?

A. By all means.

Q. In the absence of good fresh beef, will these substituted canned materials be for the best interest of the troops or those who eat them?

A. I am not competent to answer that; that is as much a military question as a scientific one.

Q. I speak of the nutritive value.

A. So far as the nutritive value goes, it is, decidedly.

Q. Have you any familiarity with the preparation of the so-called refrigerated beef?

A. Not such, sir, that I should feel it proper to appear before you as offering authoritative testimony.

Q. Do you or not know it is largely used in the United States?

A. I do, sir. Everyone knows that very well.

Q. So far as your observation has gone, personally and as an analyst, is this food good stuff?

A. Excellent.

Q. Have you ever had your attention directed to the preparation of refrigerated beef by the addition of chemicals injected therein, or washed over it, or treated with them in any way, so as to facilitate their preservation?

A. My attention has never been called to that subject in such a way as to give me any definite information about it—that is, such as would be valuable to your commission here.

Q. Do you know whether or not the refrigerated beef, as met with in the markets, has been treated chemically?

A. I have never heard of any such—that is, that could be called chemically treated. I have seen the processes at the great establishments from the bringing in of the animals for slaughter to the hanging up of the sides of beef in the room. I have been in the great packing houses in Chicago, and have had unusual opportunities for examining those products there and for taking specimens for examination, and several hundred analyses of such specimens have been made under my direction. I have also seen how such beef is transported to other places in the country—to my own home, for instance. I constantly eat it.

Q. Do you know, as a result of personal observation, or reports received, that this beef is in any way treated so that it may keep longer than it would be preserved by chilling?

A. I know of no such common practice.

Q. Have you any reason to believe, as a result of your own investigations or as the result of your studies of the question, that boric acid, or boracic acid, if you please, has been injected into the refrigerated beef to preserve it—I mean on a large scale, not experimental?

A. No, sir.

Q. Have you any reason to suspect that salicylic acid has been used for that purpose?

A. No, sir.

Q. It has been charged that the meat which was furnished the United States troops has been chemically treated or embalmed, as it has been termed, and was not proper food stuff. Now, I ask you, if you know, whether any such material has or has not been employed?

A. I do not know, sir. Perhaps I may answer your question in this way: Like everyone else in the East, I have such meat constantly on my own table at home, and naturally I am interested to know whether the food I eat is pure and contains such things or not. Nothing I have ever seen or found in my own chemical analysis, or learned from conversation with my fellow specialists, or seen in my reading, has ever suggested to me that there was any reason for me to suspect that the ordinary refrigerated beef which comes from the great packing houses of Chicago and other large cities to New England, where I live, and is sold by meat men, contains any such material.

By Captain HOWELL: .

Q. Take a quarter of beef killed here in Washington that is going to Santiago, and fill it full of boric or some other acid, whatever is necessary to do it, and

carry that from here to Santiago without chilling, is it possible to put any chemicals in it to preserve it so that anybody would not taste it in eating it?

A. I can not affirm its impossibility, but I have never known of anything of the kind, and I should be greatly surprised to learn that it had been done.

By Dr. CONNER:

Q. "When detailed to take charge of the transport *Panama*, for conveying convalescents to the United States, I obtained 2,000 pounds of fresh beef from the commissary at Ponce. It looked well, but had an odor similar to that of a dead human body after being injected with preservatives, and tasted, when first cooked, like decomposed boric acid." Does boric acid decompose under ordinary circumstances?

A. I should have to ask you for your definition of decomposed boric acid.

Q. That is what I want to ask you. Speaking generally and not as a chemist, if boric acid has been injected into beef, will it decompose, in the ordinary sense of the word?

A. Boric acid?

Q. Yes, sir.

A. In the ordinary sense of the term, I should say no. Notwithstanding, it would be possible for changes to take place in the meat, and likewise in boric acid, by which possibly the boric acid or the salt, or compound of which it formed a part, would not have the constitution which it originally had. That is, however, a subject which would require especial experimental investigation for a categorical answer. Such investigation may have been made, but I am not familiar with it.

Q. Speaking under ordinary circumstances, in a general way, does boric acid decompose or is it one of the permanent compounds?

A. It is one of the permanent compounds.

Q. If flesh is subjected to boric acid, can not that boric acid be recovered?

A. To recover it in full quantity is rather a difficult chemical operation. I have never made the attempt to find out what proportion could be recovered. Varying conditions would cause the results of the analysis to vary. The question is hardly capable of a categorical answer.

Q. Speaking generally, could you not recover boric acid?

A. Speaking generally, yes, sir.

Q. In a large measure?

A. I could not answer that question categorically, because it is a special one, which would involve a special investigation in order to give the exact quantitative answer that would be required.

Q. If boric acid decomposes—in the first place, does it under ordinary circumstances?

A. Under ordinary circumstances, no, sir.

Q. Should it ever decompose would there be an odor resulting therefrom?

A. I have never made experiments, sir, to see. I do not know what decomposed boric acid is, sir. I never had anything to do with it; I never ran across it.

Q. "I was therefore obliged, owing to its condition and the just complaints of the sick about it, and the disgustingly sickening odor it emitted when being cooked, and its mawkish flat taste when being served, and the safety of the patients, to organize a board of survey and condemn and throw 1,500 pounds, all we had, overboard." The object of this examination is to learn from you, as an expert chemist, whether there is any reasonable probability if boric acid had been injected into the beef it would decompose within a space of time, not exceeding six weeks, if it was two, and if it did decompose what the result would be. You have stated you did not think it would decompose. Am I right?

A. Yes, sir; but I must add I do not think I am competent to answer that question, because it is a subject about which the facts are not sufficiently known.

It is difficult, perhaps, for people not familiar with such things to understand how the chemical changes that occur in organic substances like flesh effect the changes that take place in inorganic substances, like boric acid, for instance. The short of it is that while one might say in general he would not expect a change to take place, which would naturally cause decomposition of boric acid, one would not be justified in saying that it could not under any circumstances take place without an amount of investigation which, as far as I am aware to-day, is not on record.

Q. We know perfectly well the professional standing that you have. Is it not likely that you are more familiar with these conditions in regard to the decomposition of boric acid than any ordinary practicing physician in the United States?

A. That, sir, is a question which I do not like to answer. It is a personal and delicate matter.

By Captain HOWELL:

Q. Have you ever been called upon to examine any refrigerated beef that had been treated with preservatives otherwise than ice and salt and salt-peter?

A. No, sir.

Q. Now, when did you ever hear of this chemical treatment of beef that smells like a cadaver, or, in other words, embalmed beef—when did you first hear of it?

A. Within a few weeks, sir; I do not remember the exact date.

Q. Do you remember what called it to your attention?

A. The general discussion to which the present investigation is contributing so much.

Q. That is what I want to know. It is the testimony taken here. Did you ever hear it before?

A. No, sir.

Q. Did you ever hear of this immense product of refrigerated beef designated as embalmed beef before that?

A. No, sir.

Q. From your connection with the Government and your examination of these plants that you speak of, and what you eat daily, do you believe it is embalmed beef?

A. No, sir. Will you allow me to say one more thing?

By Colonel DENBY:

Q. Yes, sir.

A. I have a pamphlet here, the title of which is "Meats, Composition and Cooking." It is a bulletin published by the Department of Agriculture. It says nothing of "embalmed" meat, as that was a thing not known to the writer. It does, however, attempt to set forth in as clear a manner as possible the nutritive values of meats of all kinds, including beef, and in it you may find, if you choose to look at it, a number of statements which will express the nutritive values of ordinary fresh and preserved meats, including fresh beef and canned beef. If they can be made use of by the commission, I shall be happy to leave them for reference.

By Dr. CONNER:

Q. Is this or is this not a correct account of the canned-meat situation? "The meat was utterly unfit as an article of diet for either sick or well; it had no nutriment in it, and it turned the stomachs of the men who tried to eat it?"

A. I know nothing of what the meat was.

Q. I assume it was canned beef.

A. I don't know who made that statement, and I don't wish to know; but if any such statement was made regarding the ordinary canned meats as they are found in the markets, if it applied to any specimen of canned meat that I had ever analyzed, eaten, or seen opened, or ever known about, it would be diametri-

cally opposed to all the results of chemical analyses and physiological experiments and practical experience that I am familiar with.

By Colonel DENBY:

Q. How long will this canned meat stand?

A. I don't know, sir; sometimes months and sometimes years.

Q. Sometimes it depends on the climatic influences, whether warm or not?

A. Yes, sir. Also it is a question of the way it is put up.

A representative of a number of our largest dealers in dressed and canned meats, whose aggregate annual business exceeds \$5,000,000, has requested the Secretary of Agriculture to secure from Prof. W. O. Atwater, the physiological chemist of Wesleyan University and special agent of the Department of Agriculture in charge of nutrition investigations, a summary of statements which he has lately made to the Department of Agriculture and to the War Investigation Commission, concerning the commercial and nutritive values of American meats and to give this summary to the public. This the Secretary has done the more willingly because of similar requests from meat producers and because of the magnitude of their interests. The farm value of cattle, sheep, and swine in the United States in 1898 was \$1,814,000,000. The requests include specific questions, which Professor Atwater has answered as follows:

PROFESSOR ATWATER'S STATEMENT.

The importance of the meat industry of the United States is much larger than is commonly supposed. I am informed by Hon. Carroll D. Wright, United States Commissioner of Labor, and lately superintendent of the Census of 1890, that meats make our largest manufacturing products except textiles. The value of the annual products of slaughtering and meat packing has been rapidly rising for several decades, until 1890 it had reached, in round numbers, \$565,000,000, that of textiles of all kinds being \$722,000,000. Next to meats come flouring and milling products at \$514,000,000, iron and steel at \$431,000,000, and lumber and other products from logs and bolts at \$404,000,000 per annum.

For this meat manufacture the cattle, sheep, and swine growers of the Mississippi Valley and the ranches of the West furnish the larger part of the raw material. To the agriculture of these regions and of the whole country this industry is of great moment. To consumers at home and abroad it is equally important. The noteworthy development of methods for gathering the raw material together at the great slaughtering and meat-packing establishments in Chicago, Kansas City, Omaha, and other commercial centers in the East as well as in the West, the far more remarkable development of method for slaughtering, refrigerating, packing, and canning the meats, and utilizing not only the hides but also the by-products, and the hardly less phenomenal methods of distribution throughout this country and other parts of the world, have brought it about that an ordinary family can have meat every day in a great variety of forms, fresh, salted, smoked, and canned, and at prices much lower than would otherwise be possible.

I am told that in the great slaughtering establishments, the value of the by-products, such as glue, hair, medicinal preparations and fertilizers which are made of materials that were mostly thrown away in the old methods of slaughtering, make a large and sometimes the principal part of the profit. These facts help to explain why the public reaps so great an advantage from the growth of the meat industry.

I am assured by the Secretary of Agriculture, as well as by men prominently connected with the commercial phases of the subject, that the current reports of the inferior quality of American meats, including canned meats, are doing serious injury both at home and abroad. People are very sensitive about their food, and

even if they do not believe sensational statements, they are deterred from using the best products when the wholesomeness or nutritive value is called in question. This has an important bearing upon the export of meats. The Secretary of Agriculture informs me that the value of the annual export of American meats to Europe and other foreign countries is nearly \$127,000,000. Meat producers in European countries are making great efforts to prevent the importation of American products. Unfavorable reports of the quality of these products, however unfounded, are taken up, magnified and circulated there, and used to their detriment. I have passed a number of years in Europe as a student of physiological and agricultural chemistry, and had frequent opportunity of conference with prominent men of science and government officers about these and kindred subjects, and can testify to the harm done by such statements, especially if they seem to have an official indorsement here. I have it from high authority within a few days that statements now being circulated in the public press in the United States are being used by foreign governments in defense of the restrictions they have attempted to put upon the importation of American meats, and that the injury done to the trade is very great.

As to the food value of American meats, and especially the relative amounts of nutriment in the fresh and canned product, the accurate investigations made up to the present time are as numerous and complete as are needed. Those which have been made include analyses of some hundreds of specimens as found in the great slaughtering establishments and in the markets and a small number of tests of their digestibility. When the animal is healthy, properly slaughtered, and the meat kept at a sufficiently low temperature, it improves in flavor and texture for a considerable time. Comparing canned with fresh beef, the amount of nutriment in the canned products, such as boiled, canned, and roast beef, as ordinarily sold in tin boxes, contains, pound for pound, more nutriment than fresh beef. The reason for this is simple. In the process of canning the fresh meat is boiled or otherwise heated, and part of the water is driven out, while extremely little of the actual nutritive matter is extracted. The bones are also removed, so that the can contains the real nutriment of the fresh meat divested of the bone and part of the water. The heating of the meat in the process destroys the bacteria, which would cause it to decompose, and sealing the cans hermetically prevents the bacteria from entering. Hence canned meat made from good material, well put up, keeps indefinitely without spoiling. What I have just said about the nutritive value is borne out by all the chemical analyses now available, including those made under my own direction, as well as those which I have been able to collect from other sources.

The digestibility of canned as compared with fresh meats has been tested by only a few accurate experiments, and the most that one can affirm is that the facts at hand seem to imply that there is very little difference between the two. This is perfectly natural when we reflect that canned meats, like other meats as we have them on our table, are simply cooked meats.

The flavor of meat has much less to do with its nutritive value than is commonly supposed, still it is a thing we prize. People sometimes complain that canned meats are insipid; that they lack the flavor and aroma of fresh meat. This is certainly true when the fresh meats are roasted or broiled. When meats are cooked in a hot oven or over a fire the heat brings about chemical changes, and compounds are developed which would give the peculiar aroma and flavor, but if the same meat is put into water and boiled it lacks these qualities, and we use salt, pepper, mustard, and other condiments to give the flavor we desire. Ordinary canned beef is similar to boiled beef in this respect. I lay especial stress upon this subject because I am persuaded that part at least of the complaint that has lately been made of canned beefs is due to the fact that they have been used

by soldiers who had not the facilities for preparing them for the table or the condiments which are needed to give them the desired flavor.

This matter of the nutritive value of meats demands a great deal of patient, experimental study. We do not need a scientific research to tell us how meat tastes, but we do need a great deal to show how much good we get from it and what kinds and how much we ought to eat. This inquiry should be made with great patience and thoroughness. It involves some of the profoundest problems of chemistry, physics, and biology, as is evident when we consider that such abstruse factors as the law of the conservation of energy lie at the bottom of the whole inquiry.

It is very unfortunate that the value of meats and of other food products for nutriment is not better understood. To bring the needed knowledge two things are necessary. One is careful, scientific inquiry; the other is that the knowledge should be popularized—that it be distributed so that the public may have it and use it; that, with this knowledge, people would select and use their meat and other foods much more wisely and with great advantage to health and purse. If it had been available, the present troubles would not have arisen. If the charges brought against American meats had been made against American iron or steel they would have fallen flat. People know about iron and steel not simply from practical experience, but from careful investigations and tests by chemists and engineers. The knowledge is available everywhere, but with meats the case is very different. When their value has been determined by science and has been given to the public it will be far better for all concerned.

MEMORANDUM.

I regret to be unable to send you this in better form than the accompanying clipping from the Washington Post of January 9:

CANNED MEAT AS FOOD—A DEFENSE OF IT BY THE AGRICULTURAL DEPARTMENT—ANALYSIS BY PROF. W. O. ATWATER—HOW THE CANNED GOODS ARE PUT UP AT THE FACTORY, THE ANIMALS BEING KILLED UNDER GOVERNMENT INSPECTION—THE MEATS THUS PRESERVED CONSIDERED TO HAVE A HIGHER NUTRITIVE VALUE THAN FRESH BEEF—RESULTS OF THE SCIENTIFIC TESTS MADE.

In view of the statements which have gained wide circulation regarding the nutritive value of American canned meats, tending to injure foreign and domestic trade in these goods, Secretary Wilson has called upon the Director of the Office of Experiment Stations for a statement of the conclusions of scientific experts on this matter. This statement is as follows:

The high nutritive value of American canned meats has been established repeatedly by thorough and impartial tests conducted by scientific experts. Some years ago Dr. W. O. Atwater, professor of chemistry at Wesleyan University, Middletown, Conn., began an extended investigation of the nutritive value of foods. Later this work was continued by the Department of Agriculture, with funds appropriated by Congress for the purpose, the investigation being assigned to the office of Experiment Stations, and Professor Atwater's services secured as special agent in charge. These investigations are still in progress and a large amount of information has been secured and the results published in the form of bulletins. Educational, philanthropic, and other institutions throughout the country have cooperated in this work.

The food problem has been very carefully studied in Europe. Koenig, Rubner, Etzinger, Stutzer, Gautier, Fassbender, Solntzer, and other eminent authorities have made such investigations in France, Germany, Russia, and other European

countries. The value of different foods for men engaged in ordinary occupations, for soldiers in times of peace and war, and persons in various other conditions of life has been studied. A part of these investigations in America and abroad has had to do with meats, fresh and preserved. In a communication to this department Professor Atwater says:

FOOD VALUE OF CANNED MEATS.

"It is unfortunate that the public at large have so little appreciation of the nutritive value of canned meats. They are really cooked meats divested of the inedible portions, bone, gristle, etc., which are found in fresh meats. In the cooking and canning, which is of the nature of boiling rather than roasting, water is expelled, but the amount of nutritive material removed is very small indeed, so that a pound of ordinary canned meat has, on the average, much more nutriment than the same weight of the fresh meat from which it is prepared. The removal of the bone and part of the water, while so little nutriment is taken away, leaves the meat in a less bulky and more concentrated form, so that pound for pound the canned meat has a higher nutritive value than the fresh meat.

"In a large number of analyses of fresh and canned meats, collected at Chicago during the World's Fair, and in other parts of the country before and since that time, and analyzed under my direction, the proportions of the nutritive ingredients in the canned meats have been found to be larger than in the ordinary fresh meats. This is especially true of the protean compounds, which are used by the body to build up its nitrogenous materials, as blood, muscle, and bone. Among the analyses referred to, some of the largest proportions of protean were found in the boiled meats. Such prepared meats, made of good material and properly canned or otherwise preserved, are worthy of the very high esteem in which they have long been held."

ARE SATISFACTORY FOODS.

The charge of inferior nutritive value, when applied to properly canned meats, needs only investigation for its refutation. The experience of almost every family has shown that such articles are satisfactory foods. Man requires four classes of food ingredients for the proper maintenance of life: (1) Protein or nitrogenous matter, as is found in the lean of meat, casein (curd) of milk, gluten of wheat; (2) carbohydrates, as sugar, starch, and allied substances; (3) fat, as butter, fat of meats, etc., and (4) mineral matter, such as phosphates and other salts, is also required. Meat is one of the chief sources of protein in the daily food. As shown by chemical analysis, it is composed of water, protein or nitrogenous matter, fat, and a small percentage of mineral matter. The nitrogenous matter is made up very largely of myosin, the basis of muscle.

In preparing the meat for canning, large pieces are put in vats of boiling water and thus cooked. This softens the meat, makes it more tender, and facilitates the separation of bone and gristle. After these are removed the meat is cut into pieces of proper size for the can. The top is then soldered on the can, but a small hole is left through which air and steam escape in the heating of the can which follows. This heating also kills the bacteria. The hole is then closed by a drop of melted solder and the can is hermetically sealed. The cans are then tested to see whether this handling has been done so as to protect the meat from deterioration. To this end they are kept in a warm room for a number of days. If the bacteria have not been killed the meat will decompose, gases will be produced, and the cans will swell. The number of cans that swell and thus indicate imperfect handling is said to average about one-fourth of 1 per cent. The meat in them is thrown into the waste heap with the intestines and other refuse and made into fertilizers.

DIGESTIBILITY OF PRESERVED MEATS.

By this common manufacturing process it would be impossible to remove from the meat which goes into the cans any considerable part of the actual nutriment. The chief difference between the meat as prepared in this way and that ordinarily cooked in the household is that the canned meat does not contain the bone and gristle, which are not edible.

The averages of the analyses of American meat products now available, give percentages of protein in fresh beef, rump, 14.6 per cent; tenderloin, 15.6 per cent, and other cuts not far from the same amount; the averages for canned beef are: "Boiled" beef, 24 per cent, and canned beef, 26 per cent. The proportions of fat in the canned meats analyzed was relatively smaller, doubtless because the leaner meat was used for canning. The value of meat, as of other food for nourishment, depends upon its digestibility; that is, upon the proportion of nutritive material that is absorbed from the digestive tract during its passage through the body.

Numerous tests have been made of the digestibility of fresh meats as ordinarily cooked for eating. The number of experiments made with canned meats is smaller, but there is no reason to assume any considerable difference between the two. Nearly all the protein of beef, as it is ordinarily eaten, is digested and assimilated by the system. The high nutritive value of properly cooked canned meat is therefore well settled by accurate experiment.

In the great stockyards in Chicago, Kansas City, and elsewhere, where nearly all of the canned meat is put up, all the meat is inspected on the hoof and at the time of slaughtering, by Government experts, who are on the ground all the time, and without whose examination not an animal is killed, and no shipment of meat can be made without inspection without violation of Government regulations. This is the guaranty for the quality of the meat, whether fresh or canned.

A.

Analyses of canned meats.

Material and packer.	Brand.	Analyst.	Sample taken—		Number of cans in sample.	Weight of contents found.	Water.	Protein (n × 6.25).	Fat.	Carbohy- drates.	Flesh.
			Place.	Date.							
<i>Canned corn beef.—Cooked.</i>											
Libby, McNeill & Libby, Chicago, Ill.		Atwater and Woods.	Middletown, Conn.	1891	1	Pounds. 1.6	Per cent. 63.6	Per cent. 28.8	Per cent. 14.1	Per cent. 0.1	Per cent. 3.4
Do		do	World's Fair, Chicago.	1893	1	5.9	56.5	29.2	12.0		3.9
Sydney Meat Preserving Co., Sydney, N. S. W.		do	do	1893	1	2.1	45.1	35.1	13.4		7.3
Cudahy Canning Co., Omaha, Nebr.	Rex	do	do	1893	1	6.2	54.1	27.5	15.7		3.8
Do		do	Middletown, Conn.	1894	2	3.3	58.3	27.2	12.4		3.7
Australian Meat Co., Clarence River, N. S. W.		do	do	1894	1	1.6	51.3	27.7	16.4		4.2
Armour Packing Co., Kansas City, Mo.		do	World's Fair, Chicago.	1893	1	6.1	51.8	27.2	19.9		2.0
Libby, McNeill & Libby, Chicago, Ill.	Helmet	do	do	1893	2	1.6	49.7	26.5	21.0		4.1
Cudahy Canning Co., Omaha, Nebr.		do	Middletown, Conn.	1891	1	3.3	51.9	24.7	20.2		3.4
Sydney Meat Preserving Co., Sydney, N. S. W.		do	World's Fair, Chicago.	1893	1	4.1	53.2	23.6	21.8		2.3
Armour Packing Co., Kansas City, Mo.		do	do	1893	1	2.0	43.2	20.7	31.1		6.1
Do		do	do	1893	2	3.0	45.7	22.4	29.2		4.0
Do		C. E. Waite.	University of Tennessee.	1893			52.4	22.0	22.3		3.2
Do		Helgard and Jaffa.	University of California.	1893			52.7	25.5	19.7		3.9
Average.							51.4	26.3	19.2		4.6
<i>Canned roast beef.</i>											
Cudahy Canning Co., Omaha, Nebr.	Rex	Atwater and Woods.	World's Fair, Chicago.	1893	2	4.3	57.6	26.7	15.3		1.2
Libby, McNeill & Libby, Chicago, Ill.		do	do	1893	2	4.0	62.8	26.6	11.2		1.2
Armour Packing Co., Kansas City, Mo.		do	do	1893	2	2.0	56.6	29.8	9.0		1.4
Australian Meat Co., Clarence River, N. S. W.	Ramorn	do	do	1893	2	4.0	55.8	20.3	23.6		1.3
Do		C. E. Waite.	University of Tennessee.	1893			57.3	27.2	11.7		4.4
Average							58.6	26.1	14.2		1.9

"The figures herewith were kindly furnished me by Hon. Carroll D. Wright, LL. D., United States Commissioner of Labor, and late Superintendent of the United States Census. They give figures for some of the most important of classes of products manufactured in the United States."

B.

Gross value of products for five selected industries in the United States, as reported at the censuses of 1880 and 1890.

Industries.	1880.	1890.
Textiles (all kinds)	\$532, 673, 488	\$721, 949, 262
Slaughtering and meat packing	303, 562, 413	564, 667, 035
Flouring and grist mill products	505, 185, 712	513, 971, 474
Iron and steel	296, 557, 685	430, 954, 348
Lumber and other mill products from logs and bolts	233, 268, 729	403, 667, 575

WASHINGTON, D. C., *January 12, 1899.*

TESTIMONY OF WILLIAM D. MILES.

Mr. WILLIAM D. MILES, being duly sworn, testified as follows:

By Colonel DENBY:

Q. What is your residence?

A. Kansas City.

Q. What is your business?

A. General manager of the Armour Packing Company there.

Q. How long have you been engaged in that business?

A. About twelve years.

Q. What business is it?

A. Packing, speaking generally.

Q. Do you prepare tinned meat?

A. Yes, sir.

Q. And do you do anything with the refrigerated meat?

A. Oh, yes, sir.

Q. About what is the amount of your business by the year?

A. Approximately \$40,000,000.

Q. \$40,000,000?

A. That, you understand, is the Armour Packing Company alone.

Q. I understand that is the plant at Kansas City?

A. Yes, sir.

Q. Is that connected with the Armour corporation in Chicago?

A. No. We are a corporation, but Armour & Co., of Chicago, are not.

Q. You are a corporation?

A. Yes, sir.

Q. Then it is distinct from Armour?

A. Yes, sir; entirely from the Armours of Chicago, although Mr. Philip D. Armour is an owner in the Kansas City establishment.

Q. About how many beeves do you kill in a year?

A. About 325,000.

Q. What do you do with the product? Where do you send it or sell it?

A. We sell the larger portion as refrigerated beef in the United States.

Q. Do you sell any to the Government?

A. Yes, sir.

Q. How long have you been selling to the Government?

A. Well, for peace purposes we have been selling to the Government for a number of years.

Q. During the late war, about how much did you sell to the Government?

A. Of refrigerated beef, about 1,000,000 pounds.

Q. In preparing the beef, either refrigerated or tinned, do you use any chemicals?

A. None whatever; never did.

Q. We have had the process described here by several witnesses as done by the Armour's and the Libbys and Swift & Co. Now, it is not necessary to go through that with you. Is your process about the same?

A. Practically identical with the packers you have named.

Q. With regard to Government inspectors, have you got any?

A. Yes, sir.

Q. How many?

A. Well, the Government regulates the number; there is the ante-mortem and post-mortem inspection.

Q. Do they inspect every beef that goes through your establishment?

A. Yes, sir.

Q. Twice?

A. Yes, sir.

Q. On the hoof and after it is killed?

A. Yes, sir.

Q. Do they tag it or stamp it?

A. Yes, sir; each carcass is tagged.

Q. The process is the same as with the other companies?

A. Exactly so.

Q. Well, did you have any complaints? You say you furnished about 1,000,000 pounds to the Government; did you have any complaint as to the character of the meat?

A. None whatever.

Q. You say you sell the tinned beef abroad; do you?

A. Yes, sir; we sell the tinned beef to the English Government, French Government, Japanese Government—

Q. Have you recently sold something to the Japanese Government?

A. Yes, sir; we sold a large quantity of tinned roast beef, exactly the same as that we supplied to the United States last year. We sold the Japanese Government a large quantity about a year ago, and quite recently, within a month, we have had an inquiry or request that we offer them another large quantity, and in doing so they stipulated that the brand and meat should be exactly the same as that we furnished them before.

Q. Have you had any complaints from the English or French Governments?

A. None whatever.

Q. Any complaint from anybody as to the character and condition or soundness of your meat?

A. No, sir.

Q. You are familiar all the way through with the process?

A. Yes, sir.

Q. You tell us that absolutely no extraneous article is used in preparing the meat?

A. None whatever.

Q. Any boric acid?

A. No, sir.

Q. Any salicylic acid?

A. No, indeed.

Q. Or nitrate of potash?

A. No, sir.

Q. What did you put in the meat? Did you put anything in it?

A. Nothing whatever.

Q. It is the pure meat?

A. Pure meat.

Q. Is there anything I have not examined you about bearing particularly on the question?

A. I think not, Mr. Chairman, except possibly it might be well to mention that I noticed the reports of a number of officers to General Miles, in which they commented upon this tinned roast beef.

Q. Did you send any tinned roast beef to Porto Rico or Cuba?

A. It went there. We shipped it to southern Atlantic points, and from those it went there. I have noticed a good many reports of officers to General Miles in which the terms "mussy," "distasteful," and "nasty" are used, in connection with the appearance of this roast beef in the cans when opened by the soldiers, and it occurred to me that the only reason there can be justifying such thing would be this: This roast beef is intended to be heated, and you take a tin of roast beef, neither chilled nor heated naturally there would be a little blood or jelly in such a climate on the top, and it would not be attractive. The French Government has a little spirit lamp of tin, and the soldier heats it just before it is opened. If you open it without heating, this blood might not be very attractive to the eye; but it is just as your housewife every day has a number of things that do not look well before heating, but do afterwards.

Q. How long will your beef keep in the tins?

A. Oh, indefinitely; for a number of years.

By Captain HOWELL:

Q. Have you any reports from officers to you about the condition of this beef received from the Government?

A. No; we have not, sir. We have not asked for any reports.

Q. I thought maybe some of them had communicated with you.

A. In a general way we have had letters from our own branches where we have supplied beef, and they have spoken of the satisfaction expressed by commissaries with the beef we have delivered.

Q. This canned roast beef is made out of a good quality of beef?

A. Yes, sir; it is.

Q. It is not beef used first for any other purpose than canning, such as making extracts?

A. No, indeed.

Q. And you took pains to see that it was inspected by the Government?

A. Yes, sir; we have no other beef.

Q. Every bit of that is made from beef which the Government has inspected twice?

A. Every pound.

WASHINGTON, D. C., *January 12, 1899.***BRIG. GEN. CHARLES P. EAGAN—Recalled.**

Brig. Gen. CHARLES P. EAGAN recalled.

By Colonel DENBY:

Q. General, I think probably the best plan is to let you make your own statement in your own way.

A. With your permission, I would like to rise to read it.

(On motion of Governor Woodbury, the chairman, Colonel Denby, instructed the stenographer not to report the statement of the witness, as a copy of it would be furnished for the record.)

(The witness reads his statement.)

The COMMISSION ON INVESTIGATION OF THE CONDUCT**OF THE WAR DEPARTMENT IN THE WAR WITH SPAIN.**

GENTLEMEN: I hold in my hands the official copy of the statements made to your commission by the senior major-general of the United States Army, Nelson A. Miles. When I was made Commissary-General in May last year, General Miles had already selected for his staff as chief commissary Maj. H. B. Osgood, one of the ablest commissaries of the Regular Army and of the regular Subsistence Department. I was pleased at this selection, believing that General Miles, as senior major-general of the Army, might be called to the field to command troops, that some such duty might be assigned him by the Commander in Chief of the Army, the President of the United States, in which event he would need an able, intelligent, and conscientious officer.

Judge of my surprise when one day General Gilmore, the adjutant-general for the senior Major-General of the United States Army, Nelson A. Miles, came to my office and stated that it was General Miles's wish that Maj. John D. Black, recently appointed from civil life as volunteer commissary, should be his commissary on his staff. I expressed my surprise that the senior officer of the Army should desire on his staff as his commissary a volunteer officer totally devoid of experience in the Subsistence Department, and therefore, in my opinion, wholly incompetent for such an important duty. Shortly after, about the 7th of June, General Miles sent a very ordinary, commonplace telegram to his adjutant-general at Washington, in substance inquiring what subsistence stores the Subsistence Department had at Tampa and somewhere else; some such similar inquiries to the Quartermaster-General and the Chief of Ordnance. I made a formal written reply to this, and the next morning you can judge of my amazement when I saw it published in the press of the country that General Miles had sent—I can not recall the exact words of it now—or had found it necessary to send a serious reprimand to the Quartermaster-General, the Commissary-General, and the Chief of Ordnance for conditions as he found them there.

I have to state that no such reprimand was ever received by me from General Miles or any other general, and that General Miles has no authority in his commission or his position, under the law or regulations, to send reprimands to me. I promptly sent the cutting of the paper to the Adjutant-General, requesting that inquiry be made to know who gave out this garbled version of General Miles's ordinary, commonplace telegram, though I did think then, and I think now, that it seemed absurd upon the face of it for General Miles to inquire how many or what rations were at Tampa, when, from my understanding of the case, one could not get in or out of Tampa without being made fully aware of the presence of millions of rations at that time in Tampa in furtherance of proper orders received by the Subsistence Department to place them there. Notwithstanding that this imaginary reprimand was published in the press, General Miles, from that day to this has never, in any shape or form, although I have met him, taken occasion

to express any regret for the statements made in the papers about the reprimand, nor to allude to it at all. Since asking that an investigation be made to learn who gave out this garbled and alleged reprimand, I have instituted inquiries to find my request with the newspaper clipping inclosed, and I have failed to find it. The officers of the Adjutant-General's Department have reported to me their inability to find it.

The next thing I invite your attention to in regard to General Miles is that General Shafter had in Santiago various officers duly and properly assigned to him as his staff, among them General Weston, colonel and assistant commissary-general; that General Miles demanded this officer from General Shafter, although he had at that time upon his staff as commissary Major Black, the volunteer officer whom he himself selected; that at the time that General Miles demanded Colonel Weston for his staff as commissary, Colonel Weston was the only officer of the regular Subsistence Department on the island of Cuba, and was, so far as the Subsistence Department was concerned, charged with the care and proper feeding of the troops and the proper provisioning of the transports leaving Santiago, the supervision of these duties at a most critical time, owing to the great sickness of the command; and that General Shafter protested against Colonel Weston being taken from him, but, notwithstanding, directed Colonel Weston to report to General Miles, thus depriving himself, taking off his staff at that critical time the only experienced—indeed, the only—officer of the regular Subsistence Department in Cuba. Colonel Weston cabled to me that he would leave for Porto Rico to-morrow, whereupon I cabled back that I knew of no authority for his leaving his command, and objected strenuously to it, having in mind the due and proper care of the fatigued, worn-out, and sick soldiers after such a severe campaign; and when Colonel Weston reached New York en route to Porto Rico I had him ordered to report to me here, and again objected to his going to General Miles or any one else, but stated his duty lay in going to Montauk and there caring for the troops that had been in his charge as commissary at Santiago, which I caused him to do.

At the time that the expedition under the command of General Brooke sailed from the United States to go to Porto Rico, General Miles was not even in the United States, as is well known; he was in Cuba. I fitted out the expedition to Porto Rico with ample subsistence supplies, notably and particularly putting up a ration asked for by General Brooke and sending in one of the refrigerated ships, the *Massachusetts*, 203,000 pounds of refrigerated beef—not embalmed beef, not treated by any chemical process whatsoever, but first-class refrigerated beef, as good as the country produces, and in every way sound, sweet, and proper food. General Miles had nothing whatever to do with the fitting out of subsistence supplies for the expedition to Porto Rico. This ship, the *Massachusetts*, with this refrigerated beef on board, reached Ponce, Porto Rico, the 2d day of August, 1898, and there, entering the harbor, ran upon a rock, and for aught we knew here her cargo, including refrigerated beef, would prove a total loss. Realizing that the Government had a large number of stores on the island, and the services of a depot commissary to gather them in properly, locate them in warehouses, superintend and care for their proper issue to the various commands, was necessary, I had Maj. A. L. Smith, an experienced commissary of the regular establishment, sent to Porto Rico to determine the proper place to establish a depot for the stores and to take proper care that they were properly warehoused and issued.

This officer was sent by order of the Secretary of War for duty as depot commissary, and, except to call upon him for such supplies and funds as his army needed, General Miles had no authority over him except in emergencies in his military capacity as an officer of the United States Army, but not as depot commissary. Nevertheless, he ordered him to some duty on a transport. The officer very properly obeyed the order and reported it to me, when the Secretary or Assistant Secretary of War, at my instance, informed General Miles that this

officer was sent there for depot purposes, and therefore not under his orders. It is to be borne in mind that all this time there were numerous commissaries on the island of Porto Rico, each and every one of whom was under General Miles's orders. In this connection I desire to state that there was sent with General Brooke as chief commissary—at that time the supposition was that General Brooke would be in supreme command of the troops in Porto Rico—Lieut. Col. Henry G. Sharpe, a most efficient officer of the regular establishment, who had more than a quarter of a million of dollars for any and every purpose and requirement of the Subsistence Department. All this money was available for the use and purchase of any and every article of food required or needed by General Miles.

Furthermore, Maj. A. L. Smith, who arrived at Ponce on the 24th of August, had over \$150,000 available for the same purposes. Maj. John D. Black, who, as we see, was selected by General Miles as his commissary, had \$5,000 and left this country for Porto Rico without even a check book or having, as is required, furnished his signature to the Treasurer or Assistant Treasurer of the United States, and subsequently, when more money was sent to him at the request of General Miles, he was unable to use this money, because he had no check book, and, as it appears of record, borrowed a check from another officer for the purpose of transferring to another officer—as he says, by the direction of General Miles—some \$17,000, all he had. Thus it will be seen that General Miles's statement to this commission, "If there had been paymasters down there, the men could have bought food, but there were none there," is worthy of examination as to why food could not have been bought when, as I have shown, there was over \$400,000 in money and over three months' supply of subsistence stores for 16,000 men.

I received a telegram from General Miles asking me if I could not place \$50,000 to the credit of his commissary, Major Black. I replied by sending Major Black \$10,000 in addition to the money he already had and informed General Miles that the senior commissary on the island, Colonel Sharpe, had money. I did not propose, unless it was necessary, to place such large sums of public funds in the hands of inexperienced volunteer commissaries, and especially when there was ample supply of subsistence funds in the hands of Colonel Sharpe, who, in every way, was subject to the orders of the officer commanding in Porto Rico. The cablegrams on this subject are as follows: "Ponce, August 5, 1898. With reference to funds, Maj. J. D. Black, chief commissary at headquarters, does not have a cent. Can you not cable him credit of \$50,000?" To which I replied: "Major Black has had \$5,000, and \$10,000 will be placed to his credit in New York next Monday. Sharpe, the senior commissary in Porto Rico, has money, and Colonel Smith, of the Subsistence Department, is under orders to Porto Rico as depot and purchasing commissary, and will have ample funds for all subsistence purposes."

General Miles says: "Ultimately I gave directions to expend a part of the funds obtained at the custom-house in the purchase of fresh beef." He does not say when this ultimately was, and inasmuch as he arrived in Porto Rico July 26, and was informed by me August 6 that Colonel Sharpe, the senior commissary in Porto Rico, had money, it is not for me to say why he did not avail himself of the subsistence funds to purchase beef or anything else in lieu of using the funds obtained at the custom-house. It is a matter of record that from the 2d of August until at least the 7th the *Massachusetts* was lying in Ponce with over 200,000 pounds of first-class American refrigerated beef; that none of this beef during that time was taken off at Ponce for the troops that were there. It was good beef, and it was furnished by the proper department of the War Department, whose legal duty it was to furnish it, and any officer, no matter what his rank, failing to use proper supplies sent him by the proper department for the troops does so at his peril; and if he purchases and substitutes for the good article an inferior and unwholesome one, one that the whole medical fraternity of the

United States will unite in saying is not wholesome, gives men diarrhea and dysentery, then he does so at his still greater peril. By General Miles's own statement he directed the purchase of native beef ashore while this good refrigerated beef—not embalmed beef—was there in Ponce. It was not embalmed beef, nor was it treated with any chemicals whatsoever for its preservation.

General Miles says in his statements to the commission that on July 26 he reported to the Secretary of War an abundance of cattle could be procured, and asked that ample commissary funds be furnished by first steamer. In reply to this I have to say that I never saw any such report or cablegram from General Miles of such a date; that since I heard he made this statement I have made inquiries to know if any such cablegram was in the records of the Adjutant-General's Department, where it should be if it ever came, and I am informed that no such cablegram or letter is of record there. He says, "Seven days later I telegraphed requesting that no more fresh beef be sent." He telegraphed August 2 to that effect, which telegram was received by me on August 3. Previous to its receipt I had ordered 300,000 pounds of refrigerated beef to be sent to Newport News and there loaded for Porto Rico. At the time that General Miles's cablegram was received by me, August 3, that beef was being loaded on the *Manitoba* at Newport News. The steamer left on the 5th and arrived at Ponce on the 10th, the *Massachusetts* with her cargo having meantime left Ponce. The records show that no beef was taken off the *Manitoba* for the troops at Ponce until the arrival of Lieut. Col. A. L. Smith, the depot commissary, who immediately proceeded to unload and to issue this refrigerated beef—not embalmed beef—to the troops.

Gen. Nelson A. Miles, on page 15 of his testimony, says that his commissary and quartermaster supplies were supplied in a way "not in my judgment the best way;" that he "had previously requested that complete rations be sent instead of sending them in bulk." If he ever made any such request at any time or anywhere I never saw it, and if I were to get such a request now I would regard it as a most extraordinary one, for there is no such thing as sending complete rations in large quantities otherwise than in bulk, and furthermore, complete rations were sent except where it happened that some of them were left on the wharf at Newport News because of lack of transports to carry them. The statement that he wished complete rations, and that instead of complete rations they were sent in bulk, clearly intends to convey that the rations were improperly sent. If General Miles can explain to your commission what the difference is he will do more than I think he or any other man can do, and I especially ask the commission to note this as one of the things bearing on the entire subject.

This takes me back to the very first remark made by General Miles on the subject of the Subsistence Department to your commission almost at the outset of his statements to you, as follows: "As far as the commissary stores were concerned, I think there was a sufficient amount of the kind furnished—that is, of the kind that was furnished." Inasmuch as the kind that was furnished was first-class in every respect and the same as furnished the Army heretofore and now, was the kind authorized by law and regulations, and the best, most complete, and eminently fit that could be furnished, the commission may at the outset find its clue as to what General Miles means in his subsequent remarks about embalmed beef. General Miles says that on account of the way in which stores were loaded on transports, "of course this caused great embarrassment, loss of stores, and deprived the troops of their proper food." To the extent of supplying fresh vegetables this is doubtless true, but the Subsistence Department—and General Miles well knew it—was in no manner responsible for the loading or the unloading of transports, nor the manner or style in which they were loaded or unloaded, nor the lack of sufficient storage. He says, "You ask about food. In my judgment that was one of the serious causes of so much sickness and distress on the part of the troops." General Miles is careful not to make this as an assertion; he gives it as his judg-

ment. It is not my judgment nor the judgment of others that either sickness or distress was experienced by the troops in Porto Rico because of lack of subsistence supplies or the quality of them. Because he merely expresses his judgment that way I can not take further issue with that statement than to dispute it. General Miles speaks of the manner that the troops were fed, "with a certain amount of food, bread, coffee, and articles of that kind, and beef largely driven on the hoof and slaughtered as it was required by the troops. It was done in that way during the civil war, and it has been done with almost every expedition that has started on the plains for the last thirty years. It requires no transportation to transport meat in that way, and why it was not done during this war is more than I can tell, but it was not done either with the troops in the United States or those in Cuba and Porto Rico." In reply to this I have to state that beef cattle on the hoof in tropical climates is not wholesome or fit food, because, as is well known, the meat goes to the fire before the animal heat is out of the body. During the war of the rebellion refrigerated meats were not then known to commerce and therefore were not furnished. In this war refrigerated meat for troops on the seacoast and adjacent thereto was furnished by me as the best possible food that could be furnished; and had I failed to furnish it if I could, I should have failed in one of the most important duties that falls to my lot to perform.

General Miles says, "The finest beef cattle known to exist were found in Cuba before the war, and on the island of Porto Rico." It is a well-known fact that there were no cattle whatsoever in the neighborhood of Santiago, and General Shafter cabled his appreciation of the character of refrigerated beef—not embalmed beef—that arrived at Santiago one day after the port was opened. General Shafter has repeatedly in person expressed to me his profound gratitude and appreciation of the fine beef, which he calls "the finest he ever ate"—this same refrigerated beef, not embalmed beef, that is spoken of by General Miles in his statements made to your commission. You have before you reports of various officers describing the character of the superior and fine cattle (?) that Porto Rico has furnished to the United States troops at the low price mentioned by General Miles—bulls, stags, runts, reformed cattle, which means old work oxen—a class and character of beef that the Subsistence Department never purchased in this country, nor anywhere else if it could do better, certainly not if it could get good refrigerated beef.

The statement of the character of the cattle in Cuba or in the island of Porto Rico needs no further illustration by me.

General Miles says that he requested that no more fresh beef be sent, as it could not be used more than a day from the coast. Conceding the fact that it could not be used more than a day from the coast, it was clearly his duty to cause this beef to be issued unless he positively knew—not mere surmise—that the beef furnished by the Government for his troops was not fit to feed to the troops within this distance from the coast, as the experienced officer of the Subsistence Department, Colonel Smith, who knew about the beef, who had no surmises nor prejudices in regard to it, did while the ship remained within his reach. I refer you to the reports on this subject in your possession. [See reports attached.] General Miles says, besides, that "in my judgment there is some serious defect in that refrigerator beef and also the canned beef that was furnished." General Miles gives you his judgment, not his knowledge. He fails to tell you why his judgment was that there was some defect in this beef. He has not told you that he tried it. He had numberless doctors who could have determined the matter for him if he had any doubt in the premises. He had notably one competent doctor on his staff, Colonel Greenleaf. It does not appear in his statements that he directed Colonel Greenleaf to examine this beef, either refrigerated or canned.

He says there were 327 tons of this refrigerated beef which he said you might call "embalmed beef." This statement means in effect a charge of dishonesty and

corruption on the part of the men who furnished it. That is what I have to say in regard to calling it "embalmed beef." General Miles says, in regard to the canned fresh beef, "which was condemned, as far as I know, by nearly every officer whose command used it." As far as he knows, he says, and he gives you what purports to be the statements of fourteen officers expressing their dissatisfaction with this canned fresh beef. General Miles does not inform the investigating commission how he obtained these reports of these officers nor when he obtained them, nor does he inform the commission that these adverse reports on this article of food were furnished to the War Department for its information, that it might take proper steps in the matter if the statements made by the officers quoted by him were correct. I submit for the consideration of this commission whether or not such a course, inviting criticism of anything, is not apt to procure and produce adverse criticism by some; whether such a circular letter would or would not be construed by some of the recipients as desiring an adverse report. Adverse reports could be safely made in a case of this kind of food that was used, that was gone, that could not be subjected to analysis or examination.

It is impossible now for me to reply to this charge other than that I have received favorable reports of this identical article of food, and so has your commission. In this connection it is proper to say that there is what is known as an Inspector-General's Department in the Army, whose appropriate duty is, when directed by proper authority, to examine into a matter of this kind and make an intelligent, responsible report; a report that can be met and refuted if it is false; a report that, if untrue, the author can be held duly accountable for; a report that would be of value to the Government and serve to guide it in future purchases; a report of things in existence that can be examined and tested. As it is, we have now General Miles and a few officers out of the thousands that we have had in the service expressing their dissatisfaction with this article of food, while on the other side are others who have eaten it—General Merritt, General Shafter, and others—who have pronounced it good and fit. I regret it is not in my power to cause a disinterested examination of the particular kinds of food, now passed away, adversely reported upon by these few officers in response to General Miles's method of obtaining these reports, but we can and will inspect by disinterested, able, competent people the very same kind of food, considerable quantities of which are still on hand.

In this connection I desire to say that I have observed in the newspapers statements purporting to emanate from General Miles, that 190,000 pounds, or thereabouts, of this food was condemned in Porto Rico. I do not know, and I do not assert, that General Miles has made this statement, but I do know no such quantity of this food was condemned in Porto Rico, nor do the records of my office show any material quantity of this meat condemned there or elsewhere. The entire character of this food will be properly reported on to your commission by the ablest men in America—Professor Atwater for one—and you can then determine whether the reports furnished are of any value whatever on this subject.

I note that the senior major-general of the Army, Nelson A. Miles, quotes from my evidence before your commission that I stated no man with sense would fail to use refrigerated beef in preference to native beef in Porto Rico, which, he says, "rather reflects on the commanding general of that expedition." I fail to see how any evidence given by me before your commission, before General Miles made any statements, to my knowledge, in regard to refrigerated beef, either before your commission or elsewhere, can be understood to be a reflection by me upon him then.

It never could have entered my imagination even that General Miles or any other army officer of experience could for a moment hesitate between sound, fine, American refrigerated beef and beef on the hoof in the Tropics, necessarily cooked

before the animal heat was out of the body. Herein lies the issue, and as General Miles has made it himself, and since I gave my testimony, I very willingly take up that issue, and I repeat here, and emphasize it, that there can not be a question or a doubt but that American refrigerated beef, or any refrigerated beef, is better, healthier, more wholesome, more appropriate for the soldier or anyone else than beef slaughtered on the hoof and put on the fire—as one officer says—“while the flesh is quivering,” and surely before the animal heat is out of the body. No amount of talk, no matter how high the source, can controvert this well-known fact.

When the Porto Rican expedition was fitted out General Miles did not inform the War Department, nor did the War Department believe, that the people in Porto Rico would receive the American troops with open arms and American flags flying. Had they been received in Porto Rico as they were in Santiago, refrigerated beef would have been found to have been a godsend and duly appreciated by the various commands, if not by General Miles; and had I allowed the Porto Rican expedition to go without sending with it refrigerated beef as well as other articles, I would have been recreant to my duty and would have been justly blamed by all concerned for having failed to make due and proper provision for the feeding of the troops.

General Miles was asked, “If a man refused to take that beef, was something else given him?” He replies, “No; they could get no other beef from the stores sent by the Commissary Department.” It is true they could get no other *beef* from the stores sent by the Commissary Department, but it is not in evidence that the men refused it or were given the opportunity to refuse it. General Miles was asked if it was competent for any officer to whom they made such issue to have refused to receive it, and he answers, “Yes, sir.” I say if the beef was good and fit, he could not refuse to receive it or any other subsistence supplies that were in good, fit, and proper condition, as I contend and maintain now emphatically, as against anyone whomsoever, that this identical refrigerated beef that we are speaking of was good, fit, and proper—far better than that which was fed to them—and you have it in evidence before you, from the officers of the line, that when beef on the hoof was fed to them it increased the sickness of the troops, and when the refrigerated beef was fed to them it decreased the sickness of the troops. It was my business to know the value of the beef. I did know and I know now that I was right then in sending it for the good of the troops, and here now I desire to make of record that it is neither my business nor proper that I should ask or consult General Miles as to the kind of subsistence supplies I will send to him or any other officer; that matter is settled by Congress, and neither General Miles nor I can set aside the law of the land.

General Miles is asked if the canned beef was a part of the army ration, and, when asked who fixed it as a part of the army ration, said, “You will have to ask some one here in Washington.” In reply to that, I desire to state that tinned roast beef is a part of the army ration, and this fact will be found in the Army Regulations; was purchased by the Subsistence Department and used by it for many years; that I carefully inspected it and ate it here, and that I furnished it to the Army to be used only and solely in emergencies when and where fresh beef of any kind could not be obtained. This beef that we are talking of is as much a part of the army ration as tinned corn beef, which has been used by the Army especially as a travel ration, for troops who are a few days on railroad cars. It is respectfully submitted to this commission to-day as to what should be furnished by the Subsistence Department in the way of meat when and where fresh meat of any kind can not be obtained for the Army. It is true some officers have spoken of preferring canned corn beef, but no intelligent officer wants corned beef on a march, or as a steady diet even in emergencies, if he can get the fresh beef, because it engenders thirst and leads to scurvy.

It is just as easy to furnish canned corned beef as canned fresh beef, but consideration for the welfare and the health of the troops led to the use of the tinned fresh beef for purposes solely when fresh beef could not be obtained. In this connection I append hereto a letter addressed to the Subsistence Department, before I was made Commissary-General, by Col. John F. Weston, Assistant Commissary-General, favoring this tinned fresh beef, and in this connection I desire to state that when he was Acting Commissary-General he gave the first order for this beef, so far as I know, in this war. (See Appendix A.)

General Miles says "that Porto Rico was dotted over with abundance of cattle, and if you want to ascertain the facts the beef there cost $6\frac{1}{2}$ cents per pound in our money, $12\frac{1}{2}$ cents in Porto Rican money. Now, if we want to ascertain the cost to the Government of this so-called refrigerated beef—embalmed beef—take the original cost of transportation, where it was bought, either in Chicago or New York, and to where it was delivered to the troops, and you will probably learn what the transaction cost the Government." In reply to so much of this as relates to the cost of the beef, you have it in evidence before you that the character of beef furnished at the price stated by General Miles was to some extent bulls, stags, runts, and old work oxen, called there reformed cattle. You also have it in evidence by Colonel Sharpe that when the quantity required by the Government was called for, the parties stated they could not furnish the quantity required.

I append hereto and make a part of this statement the bids received by the chief commissary in Porto Rico on public notices inviting proposals to furnish beef (see Appendix B), which shows you the value of General Miles's statement that beef could be procured at $6\frac{1}{2}$ cents American money, and this notwithstanding that to enable us to procure the lowest price possible, I had the bidders notified that the municipal tax levied in Porto Rico would not be required to be paid on beef furnished United States troops. The cost of refrigerated beef furnished in Porto Rico was 9.39 cents per pound, the contractor paying railroad freight to tide water. The contractor also furnished his own employees to care for the beef while in transports, and also erected refrigerator plants and furnished employees to attend them. Deduct this cost and then compare which beef was cheaper—native or refrigerated. General Miles was asked whether or not these reports were furnished to the Commissary-General (meaning adverse reports of refrigerated beef and Major Daly's report). He replies: "There have been a great many reports furnished at different times, but he seemed to be insisting very zealously that this beef should be used, and in his testimony, as I saw it printed in the papers, he made a statement that no one of sense would decline to receive this refrigerated beef instead of beef on the hoof at Porto Rico, which rather reflected upon the commanding general of that expedition." This statement of General Miles that the Commissary-General received many reports is ambiguous in that it does not indicate what time the Commissary-General received the reports indicated by him. He certainly never received the report of Major Daly until after General Miles made his statements to this commission.

The first report ever received by me against refrigerated beef was a report from Santiago that an ignorant board of survey had attempted to condemn refrigerated beef simply and solely upon its appearance. The Commissary-General, knowing the ignorance of people in regard to this, cabled back for General Wood, an experienced and able doctor of the Regular Army, to be called upon to pass his opinion on the refrigerated beef, whereupon General Lawton, who was then in command, General Wood, and others were constituted a board of survey, examined the beef and determined it was good. I have no knowledge of any other fault being found with this refrigerated beef. It was contracted for by various officers of the Subsistence Department and fed to the troops at each and every large camp in the United States—Tampa, Jacksonville, Camp Thomas, Camp Alger, Camp Meade, etc. I heard of some complaints, trivial complaints, of some of this beef being

spoiled by exposure in the sun and by neglect. I never heard that it was embalmed beef, or so considered; and I desire to say here that the first intimation that I ever had that this beef was chemically treated beef, embalmed beef, was read by me in the newspapers as coming from the senior Major-General of the Army, Nelson A. Miles. When I read it I could not believe it. The statements in the newspapers were so utterly at variance with the truth that I expected to see an immediate denial from General Miles.

In stating that I insisted very zealously that this beef should be used, for once in this matter I agree with him. I did and I do very zealously insist that this beef shall be used in preference to the character and class of beef that he says can be purchased in Porto Rico; in preference to cattle slaughtered and sent to the fire for food before the animal heat is out of the body; because I have the true welfare of the soldier at heart, and I have labored hard, constantly, continuously, early and late, honestly and successfully, during this entire war for the good of the soldier and for the true interests of the service. As to this "rather reflecting upon the commanding general of that expedition," as I have said before, I did not know his views at that time; but if I had known them it would not have mattered in my statement; I still should have told the truth then as I tell it now, and as I repeat with emphasis, no properly informed person will refuse such beef as was furnished by the Subsistence Department under its contracts—refrigerated beef—and take in preference the native beef, slaughtered, and fed before the animal heat is out of the body.

General Miles says that "the refrigerated beef, put in the proper cold-storage cars and then taken out at New York and other places over the country, would be comparatively fresh. When you take it out of the cold-storage cars and put it on transports without adequate cold-storage facilities, it would not keep good if shipped to the Tropics." In reply to that, I say, and say it with emphasis, that it will keep good in the Tropics; that it has kept good in the Tropics—in Manila, in Cuba, and in Porto Rico; that the very beef sent to Porto Rico kept good, was good, and, as you have in evidence already before you, that which was fed to the troops was good and had kept good. That part of the cargo of the *Manitoba* which kept good up to its arrival in New York, as the reports show you, failed to continue good because the ammonia used in the pipes to keep a low temperature gave out, and then, and then only, did the beef spoil. Had justice been done the contractors, had due effort been made to issue this beef to the troops near Ponce and within a day's march of Ponce—such efforts as were made by Colonel Smith later on—the beef would have been issued and justice and fair dealing would have been done the contractors.

The ignorance and prejudice, to speak of the matter in the most charitable sense, that prevented the use of this beef has led to loss by the contractors; men whom, I take this occasion to say, have lived up to the letter of their contracts faithfully, honorably, honestly, and caring apparently for no expense that might be entailed in the proper execution of their contract; honorable men in every way, so far as I know, and these are the men whose merchandise was permitted to spoil, entailing serious loss upon them, because due and proper effort seems not to have been made, as we have seen, to issue this beef to the troops. It is in evidence that there was adequate cold storage on the transport up to the time and long after this beef should have been fed to the troops. The prompt issue of this beef, after delay of a couple of weeks, by Colonel Smith, shines out in contrast with the failure to issue it before. My conduct, my work, has been looked into; I have not objected; I do not object to the searchlight and the full force of the sun being turned in upon me and upon my department, upon each and every detail of work, each and every contract made, each and every purchase made; the more searching the investigation and the greater number there may be, the better I will like it. I am profoundly glad of my examination; profoundly glad that the

truth can be told; profoundly glad that I have been given the opportunity that no honest man, no honorable man, no truthful man can object to, ever objects to; profoundly glad that each and every act of mine can be probed, examined, and determined.

General Miles says, "If I was furnished for any expedition in this country or any other with such stuff (meaning this refrigerated beef), I would prohibit the men from taking it." He makes this statement evidently with due deliberation. I reply to it that under the law he could not prohibit the men from taking it. The law and the regulations govern such matters, and neither the law nor the regulations leave such matters to his decision, and if he says he would prohibit it, why has he not prohibited the issue of this beef at each and every large and small camp of the United States, at Manila, and Cuba as well? The law never intended he should have such authority. Herein lies the fundamental trouble. The laws of this land never gave and never will give, thank God, the purse in addition to the sword to any general; and whenever Congress permits any general, be he whomsoever he may, to control the purse as well as to wield the sword, that day the mistake of this country will be made, and that day designing men, with military command and the purse of the United States at their disposal, may set themselves up and do those things that this country is and always has been afraid of. The law does not authorize General Miles to specify what food shall be furnished; the law does not authorize him to order that the food furnished under the law shall be set aside by him; but the law does determine in many ways, all simple ones, all legal ones, the proper manner and method of procedure where any article of food or any other article which is furnished for the troops can be condemned, set aside, and the person who furnished the improper article held accountable.

General Miles states that "some military posts and cities are furnished with this refrigerated beef, but that may be an entirely different affair; I do not know what may have been injected into it." Of course, he does not know what may have been injected into it. How could he know? And yet how easy it could have been for him to know; with a multitude of doctors under his orders how easy it would be in the past and present to determine whether any chemicals whatsoever were used in the treatment of any of this beef. We have no evidence that he endeavored properly to inform himself on this subject. General Miles says he has never known troops moving against a hostile enemy carrying an ice plant and refrigerating plant with them. Neither have I, nor have I proposed any such thing. I have purchased and, so far as lay in my power, have fed the troops at and adjacent to the seacoast with refrigerated beef to minimize the sickness, and, as far as possible, to feed the troops with the best obtainable food. Feeding troops traversing the plains of America is a very different proposition from feeding them on the seacoast and adjacent thereto.

I have been on some expeditions after Indians; I have served on the frontier about as long as General Miles, and have had, in my judgment, much more experience on the frontier than General Miles has. I have not always been a staff officer. I have commanded troops, served with them in the field, and know, as I believe, their wants far better than General Miles does. I count myself as good a soldier as he and about as old a soldier as he. I never saw the United States Army on the plains or elsewhere or in the mountains on the frontier accompanied by bands of cattle, and inasmuch as our operations since the war have been almost wholly against Indians, I say here that the man who would pursue Indians with a band of cattle as his food would be laughed at by any real soldier, no matter what his rank. Whoever heard of Gen. George Crook moving with cattle? Whoever heard of Randall or any other soldier—true soldier—moving on the plains or anywhere on the frontier with a herd of cattle? I never heard of it. This is news to me.

General Miles was asked if refrigerated beef was ever sent to him after his cablegram of August 2. He replies, "Yes, sir, it was shipped from this country three days after." It was not shipped three days after. Strictly speaking, General Miles's cablegram was received by me on the 3d, and on that very day the beef, which had been purchased in Chicago, had been shipped by Swift & Co. by railroad at their expense, was being loaded on the *Manitoba* at Newport News, and left Newport News on the 5th. Therefore it was not three days after the receipt of his cablegram, and in the true and proper sense it was not shipped at all after the receipt of his cablegram, for it had been shipped from Chicago before. Had this cablegram been received before this beef was purchased, before the contractor had gone to the expense of shipping it by rail to Newport News, I should have taken the cablegram of General Miles to our common superior, the Secretary of War, and should have been governed by his decision, and in all probability the beef would not have been shipped, not because it should not have been shipped, but as the usual and frequent concession to the senior major-general of the United States Army. General Miles should have known that when the beef arrived in Ponce, as it did, on the 10th of August, it must have been purchased before his cablegram, dated the 2d, was received by me.

I submit to this commission whether it was rational or reasonable to suppose that beef could be ordered from Washington, shipped from Chicago, and landed in Ponce, after delay in loading, etc., in seven days. Had General Miles given this a thought he must have known that it was not in real truth purchased after the receipt of his cablegram. There has never been on my part a disposition to interfere with the wishes of commanding generals. I have conceded to them everything possible; I have sought in every way not only to supply the troops with food, but to avoid loading them with impedimenta; I have frequently asked them if they wanted this, that, or the other thing; I have promptly in each and every case, wherever proper, acceded to their wishes. But I have had in mind, as I have now, my duty as Commissary-General, the duty I owe to the law and the duty I owe to the whole country. General Miles was asked by you if he based his cablegrams upon the opinion given by Dr. Daly. He replies, "I did not know so much about the character of beef at that time as I know now, because, as I say, I have been investigating the subject, and the matter will be still further investigated." So, then, we have the admission of General Miles that, up to the time he appeared before your commission, he had been investigating the subject, he makes the assertions, some of which I will speak later on, that he has made; that he has made them after investigation. Consequently he should be prepared to prove his statements.

General Miles was asked by your commission how the troops are supplied in Porto Rico now, if with refrigerated beef. He replies by contract, by beef purchased there, and he adds, "It may be that they are still sending the stuff down there, I don't know." The stuff! What does he mean by the stuff? I merely invite the attention of the commission to the use of this word, because it tends to strengthen other statements he has made about this beef to this commission, and he calls it "stuff" after he tells you that he has investigated the matter.

Referring to Dr. Daly's report, he answers the commission as follows: "He (meaning Dr. Daly) made an expert examination of it (refrigerated beef) as a medical officer who was accustomed to the use of chemicals of the description that are used for embalming bodies." "Did he make any chemical analysis of it, General?" was asked by your commission, to which he replies, "The understanding is that this is a secret process of preserving beef;" and, further, General Miles states, "It has a Keeley-motor effect on the health of the men." What General Miles means by Keeley-motor effect on the men can only be understood by connecting the remark with the others that he has made. The implication, of course, is that

it had an improper effect upon the men, probably upon their health. Assuming this to be the intent of his statement, I desire to say that it had no such effect, and I do not believe that Dr. Daly ever made an expert examination of it.

I now come to the report of W. H. Daly, major and chief surgeon, United States Volunteers. You will observe that Major Daly in his report says he was "detailed to take charge of the transport *Panama*, for conveying convalescents to the United States, and obtained 2,000 pounds of fresh beef from the commissary at Ponce. It looked well, but had an odor similar to that of a dead human body after being injected with preservatives, and it tasted when first cooked like decomposed boric acid, while after standing a day for further inspection it became so bitter, nauseous, and unpalatable as to be quite impossible for use. I was therefore obliged, owing to its condition and the just complaints of the sick about it, and the disgustingly sickening odor it emitted when being cooked, and its mawkish, flat taste when served, and the safety of my patients—255 convalescent soldiers on board—to organize a board of survey, condemn, and throw 1,500 pounds, all we had, overboard, consequently the convalescents were entirely without much-needed fresh beef, making the duty of bringing the men to the United States in an improved condition a very difficult matter."

Now, I beg to invite the attention of the commission to the fact that Major Daly says he "obtained 2,000 pounds of fresh beef from the commissary at Ponce." He does not state that he obtained refrigerated beef from the commissary at Ponce. Neither does he inform you that the ship he was on—the *Panama*—was not a refrigerated ship, and that the only means of preserving beef on that ship was ice, and that he did not at the time the beef was brought on board from Ponce have sufficient ice to preserve that beef, to keep the temperature low. He does not tell you these things; he ignores these facts, for facts they are. Why did he not obtain refrigerated beef from the *Manitoba*, lying in the harbor, transfer it from that ship to his, the *Panama*? Why did he not see to it when he had that fresh beef brought on board the *Panama* that he had ample ice to preserve it for his sick soldiers? These things he did not do. I submit herewith a telegram from the commissary on that ship, which explains this matter to you, which shows you that that beef was furnished the *Panama* from the shore, and shows you that the supply of ice was not sufficient, though they afterwards obtained supply; they procured a supply, but the beef had doubtless already become spoiled. (See Appendix C.) Major Daly does not tell you these things, but writes of a condition of affairs without the due and proper explanation of it. No beef, fresh or refrigerated, is expected to remain good unless kept at a low temperature.

I append to this paper and make a part of it a copy of the board of survey which condemned this beef. (See Appendix D.) It is usual and proper, when boards of survey condemn anything whatsoever, to give the reasons and the causes of condemnation, the origin of the deterioration. This board of survey referred to by Major Daly does not do this. It merely contents itself with "the opinion of the board being that the beef was not in prime condition when received, in the hurry of leaving Ponce." Now, we have Major Daly's own statement that he received this beef from Ponce. He does not state he received it from the *Manitoba*, which had refrigerated beef on board, which was lying in the harbor at the time, but from Ponce. If, therefore, it was refrigerated beef he received from Ponce, we have the ignorance and stupidity of somebody sending refrigerated beef to Ponce, lying there I know not how long out of the refrigerator, and afterwards sent from Ponce on board the *Panama* in such condition that the board is of opinion that it was not in prime condition when received. I am endeavoring to ascertain beyond peradventure as to whether this beef was refrigerated or the beef that General Miles prefers, the native beef of Porto Rico. Captain Irvine, commissary on the *Panama*, can give authoritative testimony on this subject. As soon as I get the absolute facts of this matter I will, with pleasure, lay them before this commission;

but in any case it is clear that, no matter where the beef came from, there was not due and proper precaution taken to provide a supply of ice to keep it in proper condition for the sick soldiers, the ship, as I have said, not being fitted up with a refrigerator apparatus, but merely having what is known as a box, an ice chest.

It was perhaps because of such ignorance as this, failure to make due provision for the sick, failure to take precautions for the preservation of delicate and necessary food, that we heard so much about the transport horrors. Major Daly says, "At Ponce, Porto Rico, much of the beef I examined arriving on the transports from the United States was also of the same character, being apparently preserved by injected chemicals to aid defective cold storage." The beef he speaks of was not injected with chemicals, nor treated in any way whatsoever with chemicals, nor did it need any aid because of deficient cold storage while they were at Ponce and for some considerable time afterwards. Neither did Dr. Daly, I am informed, inspect or see the beef on the *Massachusetts* at all. Dr. Daly is careful to say that it was "apparently;" he does not assert that it was so; he nowhere tells us that he made a chemical analysis of the beef, nor that he took any measure whatsoever to determine that this beef had been treated with chemicals.

This disposes of the core and gravamen of Major Daly's report. Naturally and of course when this beef decayed and, as was to have been expected, became rotten for lack of means of preserving it, it emitted a disgustingly sickening odor and was mawkish and flat to the taste when served, as stated by Major Daly. He says that recently, in his inspection of the Fourth United States Volunteer Infantry at Jacksonville, he observed the same odor and taste upon the fresh beef, but not so markedly, and that at the camp of the Sixth United States Volunteers at Chickamauga he also at several inspections observed it markedly. If he observed anything of the sort then, it was doubtless a condition that existed after the issuance of the beef to these commands and improper exposure and negligence in its care. However, on this point the commission has had the testimony of Colonel Sharpe, who was chief commissary for a long time there, and it will have before it Major Arrasmith, who issued the fresh meat and tinned roast meat at Chickamauga, and who, from his experience, will be perfectly competent to meet and, I am sure, to refute this statement made by Major Daly. Major Daly refers to a quarter of beef hung up at Tampa, which he said stood the test of 60 hours in the sun without being perceptibly tainted, so far as the sense of smell could detect. Colonel Osgood has testified to you that this was a matter over which the Subsistence Department had no control whatsoever, and had nothing whatever to do with it.

General Miles states as to this part of Major Daly's report as follows: "Colonel Weston confirmed the statement in a conversation I had with him a few days ago." The inference to be drawn from General Miles's statement that Colonel Weston informed him so a few days ago is a corroboration of Major Daly's statement that Colonel Osgood under oath in his sworn statement tells you the secret of this thing, and you have learned that it was not meat intended for the soldiers nor beef the Subsistence Department had anything whatsoever to do with. On the contrary, Colonel Osgood tells you that it was processed beef, being experimented upon by a man named Powell, and I desire to attach to and make a part of this statement Mr. Powell's letter offering to supply the Subsistence Department with this process, with General Miles's indorsement upon it referring it to the Commissary General, the inference, of course, being for consideration; and I also make a part of this statement the reply of this office in declining the offer. (See Appendix E.) Thus it will be seen we have disposed of all of the serious charges made by Major Daly.

I desire to state that I am informed by Major Arrasmith that Lieutenant-Colonel Maus, an aid on General Miles's staff, when at Chickamauga with Major Daly, asked Major Arrasmith if he had ever heard of chemicals being used in the refrig-

erated beef supplied to the Army. Major Arrasmith at that time was issuing every pound of meat to the Army at Chickamauga and told Lieutenant-Colonel Maus that he had never heard of such a thing as chemicals being used in the treatment of the beef, and could not see the need or necessity for any such thing. Major Arrasmith will confirm this statement under oath. The point, however, in drawing your attention to this statement of Major Arrasmith is to draw your attention to the fact that General Miles's personal aid was so informed by one of the most competent officers in the Army, who had personal knowledge, who was handling the beef, and such knowledge should have reached General Miles; and this, I am informed, was in the latter part of September, while the report of Major Daly is dated the 21st of September. If Major Daly made these alleged discoveries at Tampa, Jacksonville, Chickamauga, and Porto Rico, why did he not report them at the time for the action of those whose duty it was to see that improper food was not fed to the Army? Why did he wait until September 21 and here in Washington make a report to the senior major-general of the Army?

We have no evidence as to these so-called inspections by Major Daly, and if he was authorized to inspect, why did he not inform the commanding general of the camp? Why did he not inspect the subsistence warehouse? Why not see the commissary? Why limit his observations to the camp of one regiment? Wherein did he get his authority to inspect? I know of no order by any proper authority for Major Daly to inspect anything or anywhere. His status is not known to the War Department as an inspector, nor does he offer us any clue to indicate that he had any authority whatsoever to inspect at Tampa, Jacksonville, Chickamauga, or elsewhere. Major Daly tells us that it is impossible to keep fresh beef so long untainted in that climate without the use of deleterious preservatives, such as boric acid, salicylic acid, or nitrate potash, injected into it in quantities liable to be hurtful to the health of the consumer. It would be a reasonable question to ask how quarters of beef could have chemicals injected into them. I believe, with Major Daly, that it is impossible to preserve beef untainted for sixty hours in the sun. The Subsistence Department has never attempted such an experiment. General Miles says, "In my judgment, I do not know, but I think that to be one of the causes of so large an amount of sickness in our camps."

What does he mean by "that?" He assumes that the beef fed out was chemically treated, and ergo deduces there was sickness because of that to the troops. He carefully adds: "I do not know, and there may be other causes, of course." I denounce the assumption that chemically treated beef was fed out by the Subsistence Department at any post or camp during this war, and the expressed opinion and judgment of General Miles in this regard is wholly valueless because predicated upon a condition that did not exist. Major Daly does not go as far in his report as General Miles, for he expresses the belief that "the Commissary Department has been imposed upon by the misdirected commercial spirit of persons furnishing beef." Major Daly does not take upon himself to assert that the Subsistence Department or the Commissary-General insisted upon the use of beef chemically treated. In his report he hedged in and shirked all responsibility, for nowhere in his report does he assert or say more than that the fresh beef was apparently preserved with secret chemicals, but it only seemed so to him. General Miles tells us that Dr. Daly is a competent chemist. If it seemed to him that soldiers were being diseased and made sick by bad beef, embalmed beef, chemically processed beef, why did he not make a chemical analysis of the alleged chemicals or preservatives or embalming fluid?

It is observed that Major Daly's report is dated Washington, September 21. It is a self-evident proposition that if General Miles, on receipt of that report, believed it and failed to communicate it to the War Department for its information and action, then he failed in one of the first duties of an officer of any grade or rank. As we see, he kept this report to himself, as we know he never furnished it to the

War Department, but first introduced it to this commission, thus proclaiming to the world that the beef fed to the soldiers was chemically treated, caused sickness, and, by clear inference, that each and every one of the large packing houses who were contractors for furnishing this beef were cheating the Government, violating their contracts, imposing on the Subsistence Department, and that the Commissary-General himself, by insisting upon its use, was a party to this fraud upon the troops. This information he kept to himself all these months, or since the receipt of Major Daly's report. At no time did he inform the Secretary of War and Commissary-General of his discoveries. Why did he not perform the simple and plain duty of seeking to correct a wrong, to expose an imposition? Why wait and spring this matter and create a scandal that has reached the whole civilized world; a scandal liable to ruin thousands of people engaged in the raising of cattle, honorable merchants engaged in the sale of this beef, jeopardizing a large amount of shipping which carries this beef to Europe, and generally discrediting and putting infamy upon one of the largest industries in America?

On page 18 of General Miles's testimony he flatly calls this refrigerated beef "embalmed beef." To make that still more emphatic, he calls this beef "so-called refrigerated beef," and then flatly pronounces it "embalmed beef." This statement of General Miles is wholly untenable.

General Miles was asked by your commission how tinned fresh beef became a part of the Army ration. His answer is, "You had better ask the Secretary of War or the Commissary-General. I think they can tell you. I know it was sent to the Army as food, and the pretense is that it was sent as an experiment." General Miles in saying that this food was sent to the Army as "a pretense for experiment" says that which implies corruption, which ninety-nine out of every one hundred people will understand to mean corruption, because it was "a pretense of experiment," he says, not even giving credit to me for furnishing it as an experiment, but that I furnished it under the "pretense of an experiment." This is a serious charge; should not be made by any man lightly nor without ample evidence to support it. Taking the statement in the sense that was probably intended, the sense that has been accepted by the press of the country—indeed, some of that press, because of it, call for my dismissal from the Army and my court-martial. I answer that it was not furnished under the pretense of an experiment, nor even as an experiment. In denying this I content myself with saying such statement is untrue and unworthy of more emphatic denial. His statement reflects upon the honor of every officer in the department who has contracted for or purchased this meat, and especially and particularly on the Commissary-General—myself.

In connection with this subject I hand herewith to this commission a copy of the New York Journal, dated December 23, 1898, and invite attention to the article on the first page (see Appendix F) headed: "Miles makes grave charges against the Administration—Poisons used in beef made the soldiers ill—Tons of bad meat sent to troops in Porto Rico—These charges he declares contain only a few of the facts which he has gathered." On the very day that this paper was published I addressed the Adjutant-General of the Army the following letter:

"GENERAL: I inclose herewith an article from the New York Journal, dated New York, Friday, December 23, 1898, headed: 'Miles makes grave charges against the Administration—Poisons used in beef made the soldiers ill—Tons of bad meat sent the troops in Porto Rico,' etc.

"In view of the 'grave charges' made in this purported interview with Gen. Nelson A. Miles, I have the honor to ask that this article be referred to General Miles, to ascertain if the statements therein made and attributed to him are correct, or to what extent they are correct, and that he may be directed to state in detail whether he is correctly quoted and in what particular he is correctly or incorrectly quoted.

"Very respectfully,

"CHAS. P. EAGAN,
"Commissary-General of Subsistence."

This communication was referred to General Miles and returned with the following indorsement signed by him:

“HEADQUARTERS OF THE ARMY,
“Washington, D. C., December 27, 1898.

“Respectfully returned.

“I have repeatedly refused to be interviewed or to comment upon or discuss my testimony. When a proof is furnished me and corrected or examined, I presume the Commissary-General can obtain a copy. This subject has been referred to the Inspector-General of the Army with directions to make a thorough and rigid investigation of the whole matter, and the Commissary-General will have an opportunity of being heard.

“NELSON A. MILES,
“Major-General Commanding.”

Now, I beg to invite the attention of this commission to the fact (see Appendix G) that I did not ask him in that letter for the statements made by him before this commission, neither did I desire any information as to any reference of the matter to the Inspector-General. I asked distinctly if the interview alleged to have been had with him and published in the Journal was true in whole or in part. He replies that he has repeatedly refused to be interviewed, etc., but he does not state that he did not have that interview.

I believe that after I made a statement to the public in this matter that it was unmilitary and improper to discuss it in the papers, that General Miles did repeatedly refuse to have interviews on this subject. When a man avoids a question, the supposition is that he can not deny it. General Miles did not answer my question in that indorsement; it is not answered yet; and so I invite the attention of the commission to the whole article, but especially and particularly to that part of the article where he is asked to give a little more light on his assertion before the war commission, as follows: General Miles suggests the food was sent to his large army under pretense of an experiment, and General Miles—the paper says—stated in reply: “I think that sentence is sufficiently plain; pretense is the precise term to be used.” General Miles was given, as we see, an opportunity to deny that interview. He has not denied the interview in terms, although given the opportunity.

If he made these statements to the representative of the New York Journal, as set forth in the issue I speak of, and if he made the statement that “pretense is the precise term to be used,” he charges me with corruption without a tittle of evidence to sustain the charge. I append this article in the New York Journal, with my letter and his indorsement, to my testimony, and make them a part of it. In furtherance of the belief that General Miles is responsible for the interview I have spoken of in the New York Journal of December 23, it is not to be ignored that it has not been refuted in the public press by General Miles; that its effects are permitted to go to the whole country, carrying the weight of his position, uncontradicted. I submit to this commission and to the whole country that this account of an interview with him in the New York Journal going uncontradicted, undenied, and when the opportunity was given him a refusal to deny it in terms, places upon him the responsibility for the statements in that interview.

There appeared in the New York Journal not long since—I have hunted in vain for the copy of the paper, and will endeavor to find it before I finish this paper—an article which, in effect, intimates or flatly states—I can not recall which—in substance that the Secretary of War furnished, or caused to be furnished, the beef, fresh and tinned, spoken of by General Miles; that the Secretary of War had overridden the Commissary-General in this matter, or words to that effect. I desire to state on my oath, in reply to this or similar articles or statements from any source whatsoever, that the Secretary of War had nothing whatsoever to do with the furnishing of refrigerated meats or tinned meats, nor has he in any manner what-

soever controlled or attempted to control the contracts, the awards, or the purchases of these articles, and here and now I state that I, and I alone, am responsible, and in this connection I desire to say that he has given me a free hand in furnishing the Army with supplies and has neither controlled nor dictated nor originated any contract whatsoever.

General Miles was asked, "Is that canned beef part of the army ration?" He answered, "It was made a part of the army ration during this war, to the extent of sending to Porto Rico, as I say, nearly 200,000 pounds of it." I reply to this that it was not made a part of the army ration in this war, because it has been a part of the army ration for many years past—since February 8, 1888. Whether General Miles was ignorant of this I do not pretend to say, but whether he was ignorant or was not ignorant, he takes it upon himself to inform you when you ask him who fixed it as a part of the army ration, to say to you, "You will have to ask some one here in Washington." General Miles tells you that ultimately he "gave directions to expend a part of the funds obtained at the custom-house in the purchase of fresh beef." He does not tell you that his chief commissary had public subsistence funds in his possession, but was unable to use them because he had not a check book. He does not tell you that there was an officer of the Subsistence Department—Colonel Sharpe—under his command, within his reach in Porto Rico, chief commissary on the staff of General Brooke, who was under General Miles's orders, who had to his credit over a quarter of a million dollars.

Having traversed General Miles's statements, I ask you now to go back to the statement General Miles makes, as follows: "You ask about food. In my judgment, that was one of the serious causes of so much sickness and distress on the part of the troops." I ask this commission to contrast that statement with the facts now in its possession obtained from about 500 witnesses—officers, noncommissioned officers, and soldiers—to contrast that statement with the evidence given you by officers who were with General Miles in Porto Rico; to contrast that statement with the official reports by all the doctors who have been in Porto Rico. But the design to say, to imply, to assert, to insinuate, that sickness was caused the troops by reason of the character of the food or any of it furnished by the Subsistence Department in Porto Rico is to make an assertion that is wholly unwarranted. General Miles begins with the statement, "As far as the commissary stores are concerned, I think there was sufficient amount of the kind furnished—that is, of the kind that was furnished." This commission has before it and in evidence my statements of the kind of food and the quantity of food furnished the Porto Rican expedition. I ask the commission to carefully analyze it, and bear in mind the truth that the stores were in each case of good quality. Also, that the kind furnished was the kind designated by law; was the kind that has been furnished the Army for years, only that in some cases the kind was much better, especially and particularly was it better in the character of the beef supplied.

Grouping together the statements made by General Miles means that I have furnished or allowed to be furnished to the Army embalmed beef, which has diseased soldiers, and that a great deal of sickness arose from its use; that I have furnished meats to the Army under the "pretense of experiments," meats that made the soldiers sick, and this under the "pretense of experiment," this because of corruption. And in this connection I beg to invite your attention to the fact that many of the newspapers of the country, because of General Miles's high position in the United States Army, have accepted these views and his statements, and many of them have called for my disgrace, court-martial, and dismissal from the service because thereof. Also, that the statements of General Miles were held back by him, not furnished to the Government for its appropriate action and use, but given to you and the country at a time when the country, from the falsehoods that had been told in regard to starvation and supplies for the Army, was in a

state of excitement and ready to believe most anything. The damage that has been done by these statements is believed to be very great, but I indulge the hope and the belief that my statement when published to the country will offset the statements made by General Miles and will, in some measure, at least, do justice to those that have been wronged.

“A.”

21500.

Letter of Lieut. Col. J. F. Weston, A. C. G. S., Purchasing Commissary, New York, N. Y., to Commissary-General, dated March 24, 1898.

* * * * *

Fresh beef.—As far back as December 23 I called your attention to the possibilities of supplying fresh beef in cans, sterilized so far as to last for years. It was on the occasion of Captain Brainard going to the Klondike. Seeing its application to coming events, I have kept one eye on the matter and talked it over with the Armour Packing Co., of Kansas City. You will see from my letter of December that I described the beef referred to therein as a by-product, whereas I want the whole beef utilized, so that we would get an average in mixing. I want the steer killed, dressed, cut up, mixed, canned, and processed. I was asked for a small order, but of course gave none, so my wants were not met, and I drop it now to take up what is.

The Armour Co. is putting up a roast beef and boiled beef canned. It is from strips, and about what I wanted so far as process, but not so good, as it does not include the whole; still it is good. I have made hash, also a stew, from it that was fit for the immortal gods and not beneath the notice of a general, using a little bacon, potatoes, onions, flour, and condiments; just what a soldier has. It makes a good, palatable, hearty meal, and I am entirely safe in saying that we, in this way, can furnish fresh beef to any number of men concentrated in Florida or Cuba at about 10.5 cents per pound. It will not be steak, or choice roast; still it will be fresh beef. It can be furnished without loss, and that is more than can be said of cattle on the hoof or in refrigerator cars; it will be healthful, which is not the case if killed and consumed at once; a necessity if furnished on the hoof. To me it presents a solution of a difficult problem, a problem that must be met; there is no substitute.

The difference between what I want and what is, is one of quality; the process about the same. You will note that to make the hash or stew of which I boast it requires potatoes, onions, etcetera. Now, let us consider this. Do we wish to have these things put up with the beef? Remember that this beef can be eaten as it is, or cut up and fried and roasted. These are questions requiring some consideration. * * *

Letter of Acting Commissary-General to Lt. Col. J. F. Weston, purchasing commissary, New York, N. Y., dated Mar. 30, 1898.

Your letter of March 24 on the subject of furnishing bread and fresh meat to the portion of the Army which may possibly be stationed in or engaged in military operations in Florida or Cuba * * * has been duly received, and will be given due consideration if events should lead in the direction which you are apprehensive they will.

B.

[Cablegram.]

17 Co. J. Y. Govt., 6.05 p. m.

SAN JUAN DE PORTO RICO, *Jany. 7, '99—9.15.*

COMMISSARY-GENERAL, *Washington:*

Lowest bids for beef: Arecibo, eight seven-eighths; Barceloneta, Camuey, Fajardo, ten; Coama, nine two-tenths; Mayaguez, nine three-fourths; Ponce, eight four-fifths; no bids for other ports.

LITTLE.

(Make check 33 sub to correction.)

C.

[Western Union Telegraph Company.]

THREE RIVERS, MICH., Jan. 5, 1899.

To Col. DAVIS, *Asst. to Comsy. Genl., Washn., D. C.*:

I received some native beef and some refrigerated for use on *Panama* about September first; got the latter from commissary storehouse on shore. No freezing apparatus on ship, and limited supply of ice. Native beef was all used and some of the other; also some of the canned roast beef. I think beef became bad by exposure after removal from refrigerating apparatus. Will be in Detroit Monday and look among my papers for anything further if desired.

IRVINE, *Capt.*

[Telegram—Postal Telegraph-Cable Company.]

DETROIT, MICH., Jan. 7, '99.

Col. DAVIS, *Asst. to Com. Gen., Washn., D. C.*:

I think beef referred to had undergone some change before I received it. I noticed peculiar odor in same when receiving it, but it was not thrown overboard till four or five days afterwards.

IRVINE, *Captain.*

[Telegram—Postal Telegraph-Cable Company.]

DETROIT, MICH., Jan. 7, '99.

Col. DAVIS, *Asst. to Commy. Genl., Washington, D. C.*:

My recollection is that beef was placed on board *Panama* some time before sufficient ice was obtained. Perhaps the next day we got about seven tons. At time beef was thrown over there was enough ice to keep a low temperature in chest.

IRVINE, *Capt.*

D.

Proceedings of a board of survey on the U. S. S. *Panama*, convened pursuant to the following order:

"ORDERS 2.]

SEPT. 7th, 1898.

"A board of survey will convene on this ship to-day at 1 p. m., or as soon thereafter as practicable, to examine and report upon the condition of beef, the property of the U. S., and for which Capt. R. J. C. Irvine, 11th U. S. Inf., A. C. S., is accountable.

"Detail for the board: Major Frank Boyd, Surg., U. S. V.; Capt. W. P. Williams, A. Q. M., U. S. V.; A. A. Surg. C. Brewer.

"By order of Major Daly, Jhf. Surg., U. S. V.:

"R. J. C. IRVINE,

"Capt., 11th U. S. Inf., Adjutant."

ON BOARD U. S. S. PANAMA, Sept. 8, 1898.

The board met pursuant to the foregoing order at 9 a. m.

Present: All the members.

The board then carefully inspected the beef to be acted upon, and for which Capt. R. J. C. Irvine, 11th U. S. Inf., is responsible, and found 963 lbs. rotten and unfit for use.

The board also found that all due caution had been taken by Capt. Irvine and those in his employ for the proper care of the beef, and recommend that he be

relieved from responsibility therefor, the opinion of the board being that the beef was not in prime condition when received in the hurry of leaving Ponce.

The board recommends that the beef be submitted for the action of an inspector. There being no further business, the board adjourned sine die.

FRANK BOYD,
Major, Surgeon, 3d Ky., U. S. V., President.
W. P. WILLIAMS,
Capt., A. Q. M., U. S. V., Member.
C. BREWER,
A. A. Surg., U. S. A., Recorder.

The foregoing proceedings are approved, and I directed that this tainted meat be at once thrown overboard, as the stench from it pervaded the adjoining part of the ship, where 150 convalescents slept.

W. H. DALY,
Major and Chief Surgeon, U. S. V., Commanding Panama.

E.

Letter of Alex. B. Powell, 99 Barclay st., New York City, to Brig. Gen. Miles, War Department, Washington, D. C., dated May 25, '98.

I herewith send you a copy of a letter I have sent to the President, also General Eagan, and one to my personal friend, Hon. Amos Cummings. I think you will appreciate the fact that all fresh meats to be shipped to Cuba should be purified so as to stand the climate for a time after leaving the ice house. I feel that my process is the only one practicable.

Kindly forward the inclosed to the proper source.

[1st endorsement.]

HDQRS. OF THE ARMY, May 27th, 1898.

Respectfully referred by the Major-General Commanding to the Commissary-General of Subsistence.

F. MICHLER, Assistant Adjutant-General.

[Inclosure.]

In conversation with Mr. H. O. Armour, of the Kansas City Packing Company, he tells me the Government anticipates shipping fresh beef, pork, mutton, etc., to Cuba. As I have had long experience in shipping meats to Florida at all times of the year, by my process, I beg to suggest that in the climate of Cuba meats exposed after being taken from the ice boxes will only stand up a very short time.

I have a process which I have been using for several years shipping meats to Florida. It so purifies the meats that they will stand any climate for from four to ten days after leaving the ice house. I shipped all the meats used at the Ponce de Leon and the Alcazar, of St. Augustine, Fla., from the time they opened up to 1894, under the management of Mr. O. D. Seavey, at present manager of the Hotel Champlain, Clinton County, N. Y., who knows all about my process, if you will kindly inquire of him the results. I also shipped all the meats used by the Tampa Bay Hotel during the management of J. H. King; also the St. James Hotel, Jacksonville, Fla., and many others up to the time the Chicago people commenced to ship refrigerator cars to their agency there. In fact, I shipped one-half the meat that went into Florida via the Clyde S. S. Line previous to their having broad-gauge railroads running into the State. Of this the agents of the Clyde Line will bear me evidence.

My mode of shipping was in common barrels with a simple bag covering. In many cases it was ten days on the trip, and I never lost 100 lbs. by spoiling. I also would refer you to Count De Barry, agent for Mumm's champagne, New York, who has a residence in central Florida, who has for the past ten years up to the present time used no meats that did not come from me by my process.

My proposition to the Government would be to process all their fresh meats in the cars at Tampa, or any other place where the cars could reach. I can process ten carloads, or 100,000 lbs., in four hours, at my own expense, and put the meats in a condition to be hung up in any part of a ship, which will keep in perfect condition for from four to ten days. I simply so purify the germs of the meats that they will stand the destroying elements of any climate. My price for doing it would be one-half cent per pound. Kindly send this to the proper party and have them investigate. I shall be pleased to go to Washington to confer with any party you suggest.

Letter of Commissary-General to Alex. B. Powell, 99 Barclay street, New York, N. Y., dated May 26, 1898.

Your letter of 20th instant to the President of the United States upon the subject of preservation and shipment of fresh beef, pork, mutton, etc., to Cuba, has been referred to this office. In reply have to say that the subject of furnishing fresh beef in Cuba is now being considered. This department is not engaging any one with methods to cure meats. If it purchases meat, it will be from some one who will furnish meat and guarantee its good condition on arrival and for seventy-two hours thereafter, or who will slaughter and deliver as required wherever the troops may be.

Letter of Alex. B. Powell to Commissary-General, dated Tampa, Fla., June 12, 1898.

In case you fail to make satisfactory arrangements with parties for the supply of fresh meat to the army in Cuba, I would suggest in view of the fact that I have proven to my satisfaction that my process will keep meat seventy-two hours (I think Col. Weston will quite agree with me), should the Government desire to purchase meat delivered in Tampa by refrigeration, and will fit up their own transport with the refrigeration, refrigerating plant, and also have a refrigerating store ship in Cuba, the Government will be able to buy their meat very very much cheaper.

I have been in the business for thirty years; I can manage the whole thing for you; it will take about twenty to twenty-five days to get the refrigerating plant ready for operation. Should you entertain this idea kindly let me know, and I will furnish you with all the references you require.

F.

[New York Journal, Friday, December 23, 1898.]

MILES MAKES GRAVE CHARGES AGAINST THE ADMINISTRATION—POISONS USED IN BEEF MADE THE SOLDIERS ILL—TONS OF BAD MEAT SENT TO TROOPS IN PORTO RICO—THESE CHARGES, HE DECLARES, CONTAIN ONLY A FEW OF THE FACTS WHICH HE HAS GATHERED.

Cincinnati, Dec. 22.—Major-General Nelson A. Miles is investigating the Army beef scandal on his own account. This much he told the war investigating commission in Washington, as a witness, yesterday. To-day, soon after his arrival in Cincinnati, he told a representative of the Journal a little more about it.

General Miles's attention was directed to the fact that the newspaper reports of his testimony sent out by telegraph were necessarily meagre. He admitted that a great deal of what he said, including statements by Army officers, which he had presented to the commission in support of his evidence, was not included in the press report, but he absolutely refused to give the names of these officers or the nature of their reports, suggesting that his testimony was now in the hands of the commission.

He also cleared up a misapprehension as to the circumstances leading to his appearance before the commission as a witness. It appears that he refused to volunteer testimony and took the stand only after he had received two invitations to appear, the second one being in a message from General Dodge, president of the commission.

When asked as to the investigation into the beef scandal he is now making, to which he referred in his testimony yesterday, General Miles said:

"My suspicions were aroused several months ago and I at once started an investigation into the matter of sending meat to the army in the West Indies.

"The part in my testimony of yesterday relating to 327 tons of refrigerator beef and 198,000 pounds of canned fresh beef which was unfit for food is only an item. This quantity was sent to one town in Porto Rico. How much more was sent I do not know."

"How about the beef supply for the army in Cuba?"

"It was just as bad. The conditions there were no better than they were in Porto Rico."

"How much meat was sent to Cuba only to spoil?"

That I am unable to say."

BEEF BAD EVEN BEFORE TROOPS SAILED.

"How about rations before the army embarked? Was the beef supply no better before the transports sailed than after the army was established in Cuba?"

"It was the same thing at Tampa and the same thing at Jacksonville."

"Will you give a little more light on what you meant by this assertion in your testimony before the war commission yesterday: 'General Miles suggested that the food was sent to his large army under pretence of an experiment?'"

"I think that sentence is sufficiently plain. 'Pretence' is the precise term to be used. It is absurd to say that these enormous quantities of beef were in reality sent to an entire army simply as an experiment. To expect that beef can be exposed to the tropical sun for sixty hours without spoiling is out of the question."

"You think, then, if it was the intention to experiment with beef for the Army in the Tropics it would have been better to limit the experiment to a few companies, say, instead of the whole Army?"

"Yes, or it might do for one man to try it on his own stomach, but to feed an army, that was more than an experiment."

"When did this beef-supply question first come up? Did you protest to the War Department against sending dressed beef to the Tropics and receive no attention at all?"

"I am not going to discuss that."

"How about the chemicals used in preparing this beef?"

"As I stated in my testimony, I believe the action of these chemicals was largely responsible for the sickness in the Army. I have medical authority for this statement, and I believe it to be true."

"Will you give your authority?"

"No, sir."

The report of the Associated Press contains no names of officers or their statements, such as General Miles referred to. His attention was called to this apparent oversight, but he was silent and refused to supply the names himself.

"How far along has your own investigation into this subject progressed?" he was asked.

MILES'S OWN INQUIRY IS WELL ADVANCED.

"It began several months ago. I have the testimony of a large number of officers and men upon this matter, some of which I gave in my testimony before the commission yesterday. My inquiry is still in progress, and some of the most important information I have received has been acquired in the past few days."

"What channel will this investigation take upon its conclusion?"

"I will not discuss that. It is my duty to investigate any wrong existing in the Army, and that I am now doing in the regular military manner. The work is not completed, and until it is I will have nothing to add to the statement I made before the war commission yesterday."

"Who had the contracts for supplying the Army with rations?"

"That I will not discuss."

"What was the matter with the tents?"

"There were not enough of them, they were not suited to stand the wear, and some of them were poor."

"Were they made of inferior material?"

"I have made no such charge."

"As to the men who were wounded and were seen by you in an open wagon with the rain drenching them, can you tell to what commands they belonged?"

"They were sick men, not wounded, and belonged to different regiments. This was in Cuba, after the battle of Santiago."

"How many men did you think should be sent to Camp Thomas?"

"About 30,000 or 40,000."

"How many men were sent?"

"About 75,000, first and last."

General Miles was not a voluntary witness before the war commission. On Tuesday morning last, in response to a verbal request from the commission to appear on the stand, General Miles sent the following to Major Wells, recorder of the commission:

"In reply to your verbal invitation, I have to inform you that for reasons which I believe to be for the best interests of the Army I have no voluntary testimony to offer."

This answer evidently did not satisfy the commission, which on the same day gave out through the Associated Press the following statement:

GOT NO INVITATION THROUGH CORBIN.

"The commission stated that General Miles to-day communicated to the commission his unwillingness to volunteer testimony. A message was accordingly sent to the Adjutant-General asking him to request the appearance of General Miles before the board. No reply had been received to this communication when General Shafter rather unexpectedly appeared."

Adjutant-General Corbin may have received such a request, but if he complied with it General Miles says he never received any such order or request.

"How did you come to appear before the commission, then," General Miles was asked, "after you had declined to volunteer your testimony?"

"General Dodge, the president of the commission, put into writing a request for my attendance as a witness. To this urgent invitation I responded."

General Miles arrived in Cincinnati from Washington on the Chesapeake & Ohio Railroad this morning, and was driven direct to the residence of Frank Wiborg, in Clifton. Mrs. Wiborg and Mrs. Miles are sisters. They are daughters of Hoyt Sherman, a brother of General W. T. Sherman and Senator John Sherman. Gen-

eral Miles came down town later in the day and was the guest at an informal luncheon at the Queen City Club, where he met a party of prominent Cincinnatians. In the afternoon there was a reception at the Wiborg mansion, attended by 400 or 500 prominent society people.

G.

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, December 23, 1898.

The ADJUTANT-GENERAL OF THE ARMY.

GENERAL: I inclose herewith an article from the New York Journal, dated New York, Friday, December 23, 1898, headed "Miles makes grave charges against the Administration—Poisons used in beef made the soldiers ill—Tons of bad meat sent to troops in Porto Rico," etc.

In view of the "grave charges" made in this purported interview with Gen. Nelson A. Miles, I have the honor to ask that this article be referred to General Miles, to ascertain if the statements therein made and attributed to him are correct, or to what extent they are correct, and that he may be directed to state in detail whether he is correctly quoted, and in what particular he is correctly or incorrectly quoted.

Very respectfully,

CHARLES P. EAGAN,
Commissary-General of Subsistence.

[Second endorsement.]

HEADQUARTERS OF THE ARMY, *Washington, D. C., Dec. 27, 1898.*

Respectfully returned.

I have repeatedly refused to be interviewed or to comment upon or discuss my testimony. When a proof is furnished me and corrected or examined, I presume the Commissary-General can obtain a copy. This subject has been referred to the Inspector-General of the Army, with directions to make a thorough and rigid investigation of the whole matter, and the Commissary-General will have an opportunity of being heard.

NELSON A. MILES,
Major-General, Commanding.

H.

[Telegram.]

U. S. YARDS, ILL., *Jan. 9, '99.*

G. F. SWIFT,

(Care Arlington Hotel, Washington, D. C.)

Swift and Co. exported year eighteen ninety-eight one hundred eight thousand nine ninety-one carcasses dressed beef, weight eighty-five million nine hundred ninety-six thousand eight hundred thirty pounds. Value six million eight hundred sixty-five thousand one hundred forty-four dollars forty-four cents.

D. E. HARTWELL.

I.

WAR DEPARTMENT,
OFFICE COMMISSARY-GENERAL OF SUBSISTENCE,
Washington, January 7, 1899.

Major STEPHEN C. MILLS,

*Recorder Commission to Investigate the Conduct of the
War Department in the War with Spain.*

MAJOR: In accordance with your request of 6th instant, I transmit herewith

copies of the contracts entered into by the Commissary-General with Swift and Company, for the furnishing of beef in Cuba and Porto Rico.

Very respectfully,

CHAS. P. EAGAN,
Commissary-General of Subsistence.

(2 inclosures.)

Articles of agreement entered into this thirteenth day of July, eighteen hundred and ninety-eight, between Brigadier-General Charles P. Eagan, Commissary-General of Subsistence, United States Army, of the first part, and Swift and Company, a corporation existing under the laws of the State of Illinois, doing business in the city of Chicago, county of Cook and State of Illinois, of the second part.

This agreement witnesseth that the said party of the first part, for and in behalf of the United States of America, and the said party of the second part, for themselves and their legal representatives, have mutually agreed, and by these presents do mutually agree, as follows, viz:

I. The party of the second part shall furnish to the United States, for the use of the Army of the United States, such quantities of refrigerated, chilled, or frozen beef in bulk, delivered at points on the seacoast of the island of Porto Rico occupied by the Army of the United States, as shall from time to time be called for by the Commissary-General of Subsistence of the United States Army. The party of the second part shall be required to make shipments only at such ports of the United States as have tracks connecting railroads with docks, whereby shipments of fresh beef may be transferred directly from cars to ship refrigerators.

II. If for the purpose of carrying refrigerated, chilled, or frozen beef under this contract it shall, in the opinion of the Commissary-General of Subsistence, be necessary to equip with refrigerating apparatus, machines, and fittings steamships in addition to those now in the military service so equipped, the party of the second part shall, at their own expense, equip the additional number that the Commissary-General of Subsistence shall require, not exceeding three. The refrigerators to be supplied to these additional ships shall be of such size as the Commissary-General of Subsistence shall direct, but of size not less than three hundred thousand (300,000) pounds each; it being understood that the amount of beef of each cargo shall be reasonably commensurate with the capacity of the refrigerating plant aboard the vessel. They shall also at their own expense provide and operate refrigerator buildings at such points in the island of Porto Rico occupied by the Army of the United States as may be necessary for carrying out the object of this contract, and shall move the same from point to point on the seacoast as may be necessary for the support of moving troops. They shall keep not less than two experts with each cargo on shipboard and after landing until the beef is delivered to the proper officers of the Government, which shall not be more than seventy-two (72) hours from the time of storing same in such refrigerators. It being understood that the party of the first part will furnish locations for such refrigerators under military protection and as near the point of transfer as the commanding general can designate, at which ships carrying the refrigerated meats shall land for the discharge of said shipments. The party of the first part is to furnish free transportation and sell at cost price the necessary subsistence stores on shipboard for two men in charge of the refrigerator on each ship; also to furnish free transportation and sell at cost price the necessary subsistence stores for such men, and free transportation for materials and supplies as may be necessary for the construction and operation of such refrigerators in the ports of the island of Porto Rico as may be required for the proper carrying out of this contract.

III. The fresh beef to be furnished by the party of the second part under this contract shall be of uniform good quality from fat steers, United States Govern-

ment inspected, weighing not less than six hundred (600) pounds dressed weight per carcass, and shall be refrigerated, chilled, or frozen in quantities according as it shall be called for by the Commissary-General of Subsistence, United States Army. It is to be from fore and hind quarter beef proportionally, including all the best cuts thereof; necks cut off at the fourth vertebral joint and breasts trimmed down; shanks of fore quarters cut off four inches above the kneejoint, and of the hind quarters eight inches above the hock joint. Necks, shanks, and kidney tallow excluded from delivery. The beef is to be properly clothed by the party of the second part for its protection and proper handling, and so preserved by the refrigeration on shipboard and at the refrigerator buildings referred to in Article II hereof as that it shall be perfectly good and fit for use seventy-two (72) hours after being issued from the ships' refrigerators, or twenty-four (24) hours after being issued from the refrigerator buildings to the proper officers of the Government.

IV. All refrigerators, machines, and fittings provided by the party of the second part shall remain the property of said party, and the party of the first part shall furnish steam for hoisting beef and for operating the refrigerating machines on shipboard, but all loading and unloading to be at the expense of the party of the second part.

V. Any loss from perils of war or from acts of the public enemy shall be borne by the United States, and all loss from ordinary perils of the sea and acts of God shall be borne by the party of the second part.

VI. Whenever the fresh beef presented at the steamships or at the refrigerator buildings in the island of Porto Rico for delivery under this contract is, in the opinion of the receiving commissary, not of the kind, quality, or condition stipulated for, he shall immediately apply to the commanding officer at the point of delivery for a board of officers, to consist of as many members, not exceeding three, as can be assembled. The board shall at once examine the beef presented, and its findings, when approved by the commanding officer, shall be conclusive in regard thereto.

VII. The said party of the second part shall receive for the fresh beef accepted from them hereunder nine and thirty-nine hundredths ($9\frac{39}{100}$) cents per pound, to be paid by the Commissary at the end of each calendar month, or as soon as practicable thereafter, in the funds furnished for the purpose by the United States.

VIII. No Member of or Delegate to Congress, nor any person belonging to or employed in the military service of the United States, is or shall be admitted to any share or part of this contract or to any benefit which may arise therefrom.

IX. The party of the first part, acting for and on behalf of the United States, hereby guarantees the party of the second part that this contract shall be and remain in force for all the refrigerated, chilled, or frozen fresh beef needed by the Army of the United States in the island of Porto Rico for three months from the date hereof; and that if the Army of the United States shall remain in the island longer than three months, this contract shall be extended during the period of their so remaining, not, however, beyond the date of December thirty-first, 1898.

In witness whereof the party of the first part has hereunto set his hand; and the party of the second part has caused this contract to be signed in the corporate name by the president and the corporate seal affixed, the date first hereinbefore written.

CHAS. P. EAGAN,

Brigadier-General, Commissary-General of Subsistence.

SWIFT AND COMPANY,

By GUSTAVUS F. SWIFT, *President.*

[SEAL.]

Witness:

WM. A. DE CAINDRY,

Residence, Washington, D. C.

Attest:

D. EDWIN HARTWELL, *Secretary.*

(Executed in quintuplicate.)

Articles of agreement entered into this first day of July, eighteen hundred and ninety-eight, between Brigadier-General Charles P. Eagan, Commissary-General of Subsistence, United States Army, of the first part, and Swift and Company, a corporation existing under the laws of the State of Illinois, doing business in the city of Chicago, county of Cook, and State of Illinois, of the second part.

This agreement witnesseth that the said party of the first part, for and in behalf of the United States of America, and the said party of the second part, for themselves and their legal representatives, have mutually agreed, and by these presents do mutually agree, as follows, viz:

I. The party of the second part shall furnish to the United States, for the use of the Army of the United States, the Cuban army, and those destitute inhabitants of Cuba who are found to be in immediate danger of perishing from hunger, such quantities of refrigerated, chilled, or frozen fresh beef in bulk, delivered at points on the seacoast of Cuba occupied by the Army of the United States, as shall from time to time be called for by the Commissary-General of Subsistence of the United States Army. The party of the second part shall be required to make shipments only at such ports of the United States as have tracks connecting railroads with docks whereby shipments of fresh beef may be transferred directly from cars to ship refrigerators.

II. The party of the second part shall, at their own expense, equip the steamships on which the fresh beef hereby contracted for shall be conveyed by the United States Government to Cuba with such refrigerating apparatus, machines, and fittings as may be necessary to carry refrigerated, chilled, or frozen beef. These refrigerators shall be of such size as the Commissary-General of Subsistence shall direct, but of size not less than three hundred thousand (300,000) pounds each; it being understood that the amount of beef of each cargo shall be reasonably commensurate with the capacity of the refrigerating plant aboard the vessel. They shall also at their own expense provide and operate refrigerator buildings at such ports in Cuba occupied by the Army of the United States as may be necessary for carrying out the object of this contract, and shall move the same from point to point on the seacoast as may be necessary for the support of moving troops. They shall keep not less than two experts with each cargo on shipboard and after landing until the beef is delivered to the proper officers of the Government, which shall not be more than seventy-two (72) hours from the time of storing same in such refrigerators; it being understood that the party of the first part will furnish locations for such refrigerators under military protection and as near the point of transfer as the commanding general can designate, at which ships carrying the refrigerated meats shall land for discharge of said shipments. The party of the first part is to furnish free transportation and sell at cost price the necessary subsistence stores on shipboard for two men in charge of refrigerator on each ship; also to furnish free transportation and sell at cost price the necessary subsistence stores for such men and free transportation for materials and supplies as may be necessary for the construction and operation of such refrigerators in the ports of Cuba as may be required for the proper carrying out of this contract.

III. The fresh beef to be furnished by the party of the second part under this contract shall be of uniform good quality from fat steers, United States Government inspected, weighing not less than six hundred (600) pounds dressed weight per carcass, and shall be refrigerated, chilled, or frozen in quantities according as it shall be called for by the Commissary-General of Subsistence, United States Army. It is to be from fore and hind quarter beef proportionately, including all the best cuts thereof; necks cut off at the fourth vertebral joint and breasts trimmed down; shanks of fore quarters cut off four inches above the knee joint, and of the hind quarters, eight inches above the hock joint. Necks, shanks, and

kidney tallow excluded from delivery. The beef is to be properly clothed by the party of the second part for its protection and proper handling, and so preserved by the refrigeration on shipboard and at the refrigerator buildings referred to in Article II hereof, as that it shall be perfectly good and fit for use seventy-two (72) hours after being issued from the ships' refrigerators or twenty-four (24) hours after being issued from the refrigerator buildings to the proper officers of the Government.

IV. The equipment of steamships for the purposes of this contract shall be completed by the party of the second part within the times herein mentioned, that is to say:

If in the port of New York, the first vessel shall be completed within seven (7) days after the docking of the vessel and the giving to the party of the second part entry thereto, and other vessels at intervals of six (6) days thereafter.

If in Boston or any New England port, or Philadelphia, the first vessel shall be completed within eight (8) days after docking of vessel and giving the party of the second part the entry thereto, and subsequent vessels at intervals of six (6) days thereafter.

If in Norfolk, Portsmouth, Newport News, Baltimore, or any American Atlantic coast port south of Philadelphia, the first vessel shall be completed within ten (10) days from time of docking and the giving the party of the second part the entry thereto, and the subsequent vessels at intervals of six (6) days thereafter.

If in any Gulf port east of New Orleans, the first vessel shall be completed within twelve (12) days from the time of docking and giving the party of the second part the entry thereto, and the subsequent vessels at intervals of six (6) days thereafter.

The party of the second part shall give the United States the benefit of their skilled engineers in the selection of vessels for transports and the spaces therein, if requested.

V. All refrigerators, machines, and fittings provided by the party of the second part shall remain the property of said party, and the party of the first part shall furnish steam for hoisting beef and for operating the refrigerating machines on shipboard, but all loading and unloading to be at the expense of the party of the second part.

VI. Any loss from perils of war or from acts of the public enemy shall be borne by the United States, and all loss from ordinary perils of the sea and acts of God shall be borne by the party of the second part.

VII. Whenever the fresh beef presented at the steamships or at the refrigerator buildings in Cuba for delivery under this contract is, in the opinion of the receiving commissary, not of the kind, quality, or condition stipulated for, he shall immediately apply to the commanding officer at the point of delivery for a board of officers, to consist of as many members, not exceeding three, as can be assembled. The board shall at once examine the beef presented, and its findings, when approved by the commanding officer, shall be conclusive in regard thereto.

VIII. The said party of the second part shall receive for the fresh beef accepted from them hereunder nine cents and forty-seven hundredths of a cent ($9\frac{47}{100}$) per pound, to be paid by the commissary at the end of each calendar month, or as soon as practicable thereafter, in the funds furnished for the purpose by the United States.

IX. No Member of or Delegate to Congress, nor any person belonging to or employed in the military service of the United States, is or shall be admitted to any share or part of this contract, or to any benefit which may arise herefrom.

X. The party of the first part, acting for and on behalf of the United States, hereby guarantees the party of the second part that this contract shall be and remain in force for all the refrigerated, chilled, or frozen fresh beef needed by the Army of the United States in the island of Cuba and for the Cuban armies and

the destitute inhabitants for three months from the date hereof: and that if the Army of the United States shall remain in the island longer than three months this contract shall be extended during the period of their so remaining, not, however, beyond the date of December thirty-first, 1898. After December thirty-first, 1898, this contract may be extended for such additional period or periods of time, not exceeding the thirtieth day of June, 1899, as may be mutually agreed upon by the parties hereto.

In witness whereof the party of the first part has hereunto set his hand, and the party of the second part has caused this contract to be signed in the corporate name by the president and the corporate seal affixed, the date first hereinbefore written.

CHAS. P. EAGAN,
Brigadier-General, Commissary-General of Subsistence.
 SWIFT AND COMPANY.
 By GUSTAVUS F. SWIFT,
President.

[SEAL.]

Witness:

WM. A. DE CAINDRY,
Residence, Washington, D. C.

Attest:

D. EDWIN HARTWELL, *Secretary.*
 (Executed in quintuplicate.)

(During the course of the reading, papers referred to in the statement were introduced to be annexed and made part thereof, and were marked consecutively Exhibits A, B, C, D, E, F, G, H, and I.)

(Where the word "committee" occurs in the statement of the witness, he authorizes that it be changed to "commission," upon the suggestion of Colonel Denby.)

Colonel DENBY. As you go along in your statement, you say: "It is the duty of the committee;" the suggestion has been made to me that you might authorize the stenographer to either leave that out or change it; the phrase has been objected to.

(Witness acquiesced in the suggestion.)

(At the conclusion of the reading of the statement, the commission went into executive session, and at the conclusion of such session, the witness was recalled and the following proceedings had:)

By Governor WOODBURY:

Q. I understand you to state in your testimony which you gave when you were before us the other time that your contract with Swift & Co. was that the meat should remain in good condition for seventy-two hours after delivery, provided it was covered and put in a shady place?

A. Yes, sir.

Q. I have the contract here, and I want to ask you, after looking it over, if you do not want to modify that statement. This is the way it reads: "They shall keep not less than two experts with each cargo on shipboard and after landing until the beef is delivered to the proper officers of the Government, which shall not be more than seventy-two hours from the time of storing same in such refrigerators, it being understood that the party of the first part shall furnish locations for such refrigerators, under military protection, and as near the point of transfer as the commanding general can designate and at which ships carrying the refrigerated meat shall be landed in the discharge of such shipments." Now, it says here that beef is to be properly clothed by the party of the second part—that is, Swift & Co.—for its protection, and so preserved by the refrigerant on shipboard and at the refrigerator buildings referred to in article 2 hereof as that it shall be good for

seventy-two hours after being issued from the ship's refrigerator or twenty-four hours after being issued from the refrigerator buildings to the proper officers of the Government.

A. I wish to state that that contract contains an error. The intention was to make that say good for seventy-two hours after delivery to the troops, whether from the refrigerator or from the shore.

Q. But as it exists—

A. I wish to say that is an error that crept into that contract and escaped my notice. My intention was to demand that the beef should be good for seventy-two hours after delivery to our people, whether from the ship or from the refrigerator ashore. I shall have to modify that. I thought my ideas were from the contract. That escaped my notice.

Q. Please state whether or not, from the experience you have had and the knowledge you have gained as to the time that beef will keep in a tropical climate—whether it would not be impossible for beef to keep seventy-two hours.

A. I don't believe it would be impossible to keep seventy-two hours if properly handled. I believe if it is properly handled and cared for, it will keep seventy-two hours after being taken out of the refrigerator.

Q. Without any ice?

A. Yes, sir; without any ice.

By Dr. CONNER:

Q. What do you mean by being properly handled?

A. To be kept constantly in the shade and covered, so that the flies can not reach it, and not exposed, as I have had it reported to me—dumped into a cart with the bottom covered with manure and the men sitting on top of it. I have been told repeatedly by officers of that. I intended to make the contract so that the beef should be good and fit for use seventy-two hours after being taken out of the refrigerator, whether it was on shipboard or land; and the party of the second part, Swift & Co., should cover it with cloths to keep flies off, and we on our part should keep it in the shade. My reason for that is this: When I commenced looking at the prospect of supplying the Army with fresh beef, I was appalled at the situation. I had reason to believe there was no beef in Cuba. This tinned roast beef I recognized as good for a day or two in the absence of fresh beef in the trenches, but I knew it could not meet the situation. When it comes to supplying the Army with a herd of cattle, every soldier can tell you it was a nuisance. Again, the difficulty of transporting beef cattle and herding them in the neighborhood of the troops, the losses to the Government for maintenance of the herd, the proverbial failure of a steer to weigh anything like what the commissary has them on his papers—I don't know why, etc. Then the difficulty of an invading army handling beef appalled me. When I took up this subject, I knew the difference between refrigerated beef and frozen beef. I knew refrigerated beef would keep longer than frozen meat. I knew frozen meat was dangerous, as it first decays at the bone, having what is known as bone taint, which is not found out until too late, and I knew refrigerated beef decayed on the surface, and you could see the decay.

I know this refrigerated beef is kept by hotels for a time to make it mature, and that it was unsightly, but I knew that by trimming it down it was perfectly good. Then the question with me was, How long will refrigerated beef keep? I was satisfied General Shafter and the other commanding officers would not keep their troops in the towns, but 6, 8, 10, 12, or 15 miles away. I had in mind a day's journey to where the troops would be. When I first asked the packers, How long would you guarantee this to keep after taking it out of the refrigerator? they all objected to any such condition and wanted to deliver it to me on the ships. I said, I won't do that; I haven't the means to take care of it, I will furnish trans-

portation, but you must be responsible for its good condition up to the moment of its distribution to the troops and to keep afterwards seventy-two hours. I made a contract the other day in San Francisco to supply the fresh vegetables for the troops in Manila every ten days, with the understanding that they must be good for ten days after delivery. The same contract I have made for troops in Cuba. If they decay in four or five or even nine days after delivery, the Government does not have to pay for them. Now, then, several of these houses finding me determined on this question, looked it up, and the firm of Swift & Co. sent a young man named Gardner, a very bright young man, to me, and he said, "I would not have the slightest doubt about undertaking it for forty-eight hours, but not seventy-two." The Armour Packing Company sent to Tampa, not process beef, but refrigerated beef and beef kept in ice boxes, to see how long beef treated with ice and refrigerated beef would last. My impression is—I can look it up; I have got a report; I think so—my impression is that their refrigerated beef hung up in Tampa there eighty hours or more.

Q. You mean without ice?

A. Yes, sir; in the shade without ice. The report stated that the beef kept by ice spoiled first.

Q. Have you been able to make a contract with that provision—seventy-two hours—yet?

A. I thought I had made it. Which contract is this, the Cuban or Porto Rican? Major MILLS. They are both there.

By Captain HOWELL:

Q. Do you consider the statement you made here before us as a part of your testimony?

A. Which statement, sir?

Q. That long one you read.

A. Yes, sir.

Q. And you swear to it?

A. Yes, sir; I do, sir.

[Reports referred to on page 3568.]

[Extract.]

* * * * *

"A refrigerator car containing fresh beef in quarters from Armour & Co. is daily hauled out to the vicinity of the camps. Between 4 and 5 a. m. a crew of Armour's men are there to handle the meat. The brigade and regimental commissaries are there with their wagons, the quarters of beef are weighed, inspected by the brigade commissaries, and then delivered to the regimental wagons and hauled to camp. If the brigade commissary rejects any quarter of beef as tainted or otherwise unfit for issue, it is immediately replaced by the contractor with another quarter. If any regimental commissary objects to taking any of the meat, it is at once replaced by the contractor at the request of the brigade commissary. This inspection is *final*. After the meat is hauled away from the car and taken to the regiments, no further complaints on the part of regimental officers, surgeons, or company cooks can be entertained, and if subsequently the meat is found to be objectionable, it is only due to the carelessness of the regimental commissary or company commanders in not giving proper instructions for the handling of or caring for the meat. In this hot and damp climate the moment refrigerated beef is taken from the car it should be carefully covered with *clean* paulins or canvas, screened from the sun and flies, cut up *at once in the shade*, and taken immediately to the company kitchen and either put on ice (which is furnished) or else put on the fire to cook. The meat supplied by Armour & Co. is excellent in quality, but after delivery from a refrigerator car must be handled properly and without any delay.

"Whenever a well-founded complaint has reached me, I have at once given such directions that it has been corrected, except in certain cases where regimental boards have taken the matter in their own hands (in defiance of Army custom) and condemned the entire issue of beef, when a careful and judicious trimming away of the tainted parts would have left the bulk of the meat sweet and good, thus causing a useless waste of the most desirable part of the soldier's ration. Constant and unceasing supervision and attention is given the question of a proper food supply for the troops in this corps, and it is believed by me that any complaint is groundless, so far as the administration of the Commissary Department is concerned; and that is entirely due to the almost criminal negligence on the part of regimental and company officers in not supervising and controlling in a proper manner the care, preservation, and issue of the soldier's ration."

The foregoing is a true copy of an extract from a letter written by me to Major-General Fitzhugh Lee, commanding the Seventh Army Corps.

O. E. WOOD,

Lieut. Colonel and Chief Commissary Seventh Army Corps.

HEADQUARTERS SEVENTH ARMY CORPS,
OFFICE CHIEF COMMISSARY,
"Camp Columbia," Havana, Cuba, Dec. 31, 1898.

The COMMISSARY-GENERAL OF SUBSISTENCE, UNITED STATES ARMY,
Washington, D. C.

GENERAL: I have the honor to state for your information the following facts in reference to the quality of the supply of fresh beef furnished the troops of this corps under my direction as chief commissary since the organization of the corps in May last, believing that my experience in the field constantly with troops for the past seven months may be of some value as a matter of record.

From the 31st of May to the 11th of December I have had dealings with the Cuddahy Packing Company, Armour & Company, and Swift & Company, all of whom have supplied refrigerated beef to the troops of this corps, and it has given universal satisfaction.

It took some time to teach the volunteer troops how to properly handle the meat after issue from the refrigerator car, and during this process of teaching there were naturally a few complaints; but in every instance when it was the fault of the contractor it was immediately replaced by good beef, and where it was the fault of the volunteer regimental commissary or of the company cooks in not using proper precautions—as was generally the case—it was corrected by more careful oversight.

Constant inspections were made of the company kitchens and messes, and type-written instructions were distributed throughout the corps. In this way and by these means the refrigerator beef always gave complete satisfaction, and the health and good condition of this command was due, in the main, to this fact—that no bad meat was ever issued, the percentage of sickness in the Seventh Corps being far less than in any other of the corps.

While stationed in Jacksonville I made several inspections of the refrigerator plant of Armour and Company, and always found the meat in good condition and all the appurtenances spotlessly clean.

With regard to the "canned roast beef" furnished by Armour and Company, it has never been issued in this corps except as part of the travel ration, and no complaint as to its quality has ever reached me in my official capacity.

After seven long months in a hot climate, and with the prospect of many more in the island of Cuba, I am of the opinion that refrigerated beef, if it is properly

handled immediately after the issue, will give better satisfaction than to have lean grass-fed Texan steers sent here to be killed and eaten on the same day.

Very respectfully,

O. E. WOOD,
Lieut. Colonel and Chief Commissary,
Seventh Army Corps.

(One enclosure.)

OFFICE PURCHASING AND DEPOT COMMISSARY, U. S. ARMY,
Havana, Cuba, December 31st, 1898.
COMMISSARY-GENERAL OF SUBSISTENCE,
War Department, Washington, D. C.

SIR: I have the honor to report that on my arrival at Ponce, Porto Rico, on August 25th, 1898, I heard complaints as to the quality of the native beef being furnished, and soon learned that there was, and had been for several weeks, some refrigerated on the transport *Manitoba*, which first touched at Ponce about August 10th (the date can be ascertained from the report of Captain Aspenwall in your office), but was at this time temporarily at another Porto Rican port.

When the *Manitoba* came back to Ponce about September 4th, 5th, or 6th, I directed a sufficient quantity of beef should be taken off daily to supply the troops within a radius of five or six miles. This was done, and any part that was rejected by troop commanders or not issued was destroyed by me after it had laid out long enough to become tainted.

Among others to whom the refrigerated beef was issued I remember the following officers as having spoken of the immensely superiority of it over the native beef: Major H. P. Birmingham, surgeon of the general hospital; Captain Irvine, 11th Infantry, who was acting as commissary for the steamship *Panama* (I think), loaded with convalescents en route to the United States; Captain W. P. Evans, commanding battalion 19th Infantry; Captain Hoppin, 2nd Cavalry, commanding cavalry squadron.

There were no preparations made for the receiving and taking care of the beef on shore. It had to be unloaded by lighters and thrown on the floor of the commissary storehouse until the troops called for it in open wagons. It was, therefore, subjected to the worst possible usage in handling. It was frequently 12 to 18 hours off the vessel before being issued. One issue to Captain Hoppin was over 24 hours in the storehouse. Notwithstanding this the meat was in good condition except pieces which had not been sufficiently protected but could be trimmed off with some loss.

I inspected the refrigerator beef each morning before it was issued and know that it was in good condition, except as stated above. Cases where it was rejected were, I think, due to the prejudice arising from the appearance when out of the refrigerator a short time and to the fact that it was known the beef had been a long time on the vessel in Porto Rican waters.

The officers, without exception, to whom I spoke condemned the use of the native beef, which had to be consumed the same day it was slaughtered.

I remember that some of the officers from two light batteries which were stationed near Ponce asked to be allowed to draw canned beef and the commanding officers of the Kentucky Vol. regiment requested to be allowed as much bacon as possible, saying the native beef was not liked.

I further beg to call your attention to the fact that, with the exception of soap and candles for two or three days, there was never a time after my arrival when the main storehouse at Ponce could not issue the complete ration, fresh vegetables not included. These spoiled so rapidly that it was deemed best to commute the ration of them for several weeks and give the troops the money value to buy other articles. Coarse salt was issued in lieu of fine on one or two occasions.

Commissary stores had been so unsystematically unloaded and stored at Ponce that it was hard to tell what articles were on hand in the island in sufficient quantity to provide for the wants of the soldiers.

There was an invoice of sales articles in the commissary office of sales stores on the *Manitoba*, which had been shipped from the United States about the first of August by Colonel C. A. Woodruff, but they had not been unloaded when the steamer first touched at Ponce. Consequently the troops in the vicinity of Ponce were deprived of sales articles except a very few fancy articles, which I was informed had been left over from the stores brought for General Miles' use and turned in when not wanted by him.

These remarks apply to condition of subsistence affairs at Ponce, where I landed and devoted my attention to regulating them, until ordered to Havana on October 11th.

I further beg to call your attention to the receipts filed with my July and August returns in your office from the commissary officer of each artillery, cavalry, and infantry command which left Port Tampa for Porto Rico up to August 16th with sixty days' rations. These receipts will show that complete rations were furnished to every vessel, with the exception of a small portion of the fresh vegetables, that it was well known could not keep sixty days.

I further state that about 10 a. m. October 10th, on taking leave of General Henry, commanding U. S. troops at Ponce, he requested me, among other things, to say to the Hon. Secretary of War, on my arrival in Washington, that the rations furnished to the troops in Porto Rico were abundant in quantity and excellent in quality. General Henry's message was not delivered, because I felt that it would have a boasting or prejudicial appearance delivered by myself.

My recommendation for establishment of refrigerators and the issue of refrigerated beef in Porto Rico was based on the most thorough and conscientious investigation of the matter it was possible to make.

Respectfully,

A. L. SMITH,

Lt. Col. and C. S., U. S. A., Pur. and Depot. C. S.

U. S. SUBSISTENCE DEPARTMENT,

Honolulu, H. I., U. S. A., January 4th, 1899.

Brig. General CHAS. P. EAGAN,

Commissary-General of Subsistence, U. S. Army,

Washington, D. C.

GENERAL: If there is any intention to send a regiment here to do garrison duty, I should like to state that from present indications the beef supply of the islands will not be sufficient to meet that and the growing demand of the people of the islands, caused by an increase of population. The meat supply is sufficient for the present garrison. I write this so that arrangements can, if desired, be made in advance for the sending of refrigerated beef from San Francisco and the erection here of a refrigerator plant. The troops on the transports that have passed through here have usually preferred to consume their refrigerated beef to using the Hawaiian beef, which, although perfectly good and satisfactory, is not the equal of the refrigerated beef that has passed through here on the transports. I think that refrigerated beef could be sent here, as I have heard no complaints in regard to it from any of the large number of transports that have lately passed through here.

All the transports that leave San Francisco for Manila should be supplied for their entire trip with refrigerated beef, as it will not be possible for me at present to supply them with beef from this point, as I have hitherto done during their temporary stay in port.

The meat contractors, the Metropolitan Meat Co., are making arrangements to bring in refrigerated beef, and are putting up a plant. If it is not thought best for the Government to bring in refrigerated beef and erect a plant of its own, I have but little doubt that the Metropolitan Meat Co. will arrange to meet all demands at reasonable rates, and give the troops the advantages of many changes in their diet, as heretofore.

I am, General, very respectfully, your obedient servant,

PHILIP M. LYDIG,

Captain and Commissary of Subsistence, U. S. V., Chief Commissary.

HAMMOND, IND., Jan. 5, 1899.

Lieut. Col. O. M. SMITH,

Purchasing Commissary, U. S. Army, No. 250 Illinois St., Chicago.

DEAR SIR: We wish to say relative to the delay in replying to your letter of Dec. 27th that the writer has been out of the city, and therefore could not reply to it at an earlier date.

Yours, respectfully,

THE G. H. HAMMOND COMPANY.

By J. P. LYMAN, *Genl. Manager.*

HAMMOND, IND., Jan. 4, 1899.

Lieut. Col. O. M. SMITH,

Purchasing Commissary, U. S. Army, No. 250 Illinois St., Chicago, Ill.

DEAR SIR: Replying to your favor of December 27th, we beg to say that we are packers of tinned roast beef, which has been an article of commerce for eighteen to twenty years, large quantities of which are used in this country, chiefly in localities where fresh beef is expensive or not available. A great quantity is exported to foreign countries, where it is used to a large extent in the armies, for the reason that tinned roast beef does not possess the salty flavor of tinned corned beef, which is conducive to thirst.

We do not make soup from the water in which the roast beef is cooked.

Tinned roast beef is cooked more than tinned corned beef, for the reason that the latter is fully cured before being canned, while roast beef is made from fresh beef.

No chemicals of any kind or nature are used in preparing roast beef, nor do foreign ingredients of any kind whatsoever enter into its composition.

No scraps are used, but only the cuts of fresh, wholesome, and Government-inspected beef. In the process of canning roast beef no tallow is used or afterward poured in the can. The fat that is found in the cans is only that which comes from the meat after being put in cans, and which properly belongs to it and is part of the meat.

With reference to refrigerated beef, would say that this company has for thirty years been a shipper of refrigerated beef, which is distributed throughout this country, as well as large quantities being exported to England in refrigerator compartments. During that time we have shipped several million pounds every week, and we have never used any chemical or drug whatsoever in preparing it or placing it upon the market, and have never yet learned of one instance where any person was injuriously affected by eating refrigerated beef.

We cordially invite the public and any representative of the Government to witness in every detail the preparation for the market of either tinned beef, or the fresh beef we ship.

Very respectfully, yours,

THE G. H. HAMMOND COMPANY.

Per J. P. LYMAN, *G. Mgr.*

OFFICE OF PURCHASING COMMISSARY, U. S. ARMY,
No. 250 Illinois street, Chicago, Ill., January 5th, 1899.

The COMMISSARY-GENERAL OF SUBSISTENCE, U. S. ARMY,
Washington, D. C.

SIR: In further acknowledgment of your letter (28953) of the 25th ultimo, I have the honor to forward herewith letter of the 4th instant from the G. H. Hammond Company, of Hammond, Ind.

Very respectfully, your obedient servant,
O. M. SMITH,
Lieut. Col., C. S., U. S. Army, Purchasing Commissary.

(1 inclosure.)

WASHINGTON, D. C., *January 13, 1899.*

TESTIMONY OF MAJ. GEN. LEONARD WOOD.

Maj. Gen. LEONARD WOOD appeared before the commission, was sworn, and testified as follows:

By Colonel DENBY:

Q. General, state your name, residence, and what positions you have held in the Army.

A. My name is Leonard Wood; residence, Santiago, Cuba, my station at present. I have held the positions of first lieutenant and captain in the Medical Department, colonel of the First Volunteer Cavalry, brigadier-general; present grade, major-general, volunteers.

Q. Where have you served, General, in the last war?

A. I have served in and about Santiago. I organized my regiment at San Antonio and took it to Tampa, and from Tampa went with the first expedition to Santiago, and was present in the work at Santiago, and have been there ever since.

Q. General, you understand that this commission has been organized for the purpose of inquiring into the conduct of the war by the War Department—

A. Yes, sir.

Q. And we would be glad to hear from you, without special questioning, any statements you propose to make as to the conduct of the war in all its branches that have come under your knowledge—first, the embarkation of the troops at Tampa, their arrival at Santiago, and of their care; as to any deficiencies of supplies, of munitions of war, or medical stores; in fact, as to all the questions involved.

A. You would like a general statement of my impressions of the conduct of the war?

Q. Yes, sir.

Governor WOODBURY. Except as to strategy.

WITNESS. I understand that. I can say this: that I should be perfectly willing, and I believe every officer and man of my regiment and of the troops I have commanded would be perfectly ready, to start on the 1st of next June and go on exactly the same expedition, and they would do it without a moment's hesitation and without any particularly dreadful recollections of the present campaign. I would say, moreover, that we have had in every Indian campaign of any consequence that I have ever engaged in a great deal harder service, and a great deal more suffering for the want of food, and a great deal less shelter. We had never served in that climate, so peculiarly deadly from the effects of malaria, and in this respect my opinions have changed very much since the close of the war. If

I had been called before you in the first week of August I might have been disposed to have answered a little differently in some respects. I have been there ever since, and have seen regiments come to Cuba in perfect health and go into tents with floors and with flies, camped up on high hills, given boiled water, and have seen them have practically the identical troubles we had during the campaign. The losses may not have been as heavy, as we are organized to take them into hospitals protected from the sun, which seemed to be a depressing cause. All the immune regiments serving in my department since the war have been one time or another unfit for service. I have had all the officers of my staff repeatedly too sick for duty. I don't think that any amount of precaution or preparation in addition to what we had would have made any practical difference in the sickness of the troops of the army of invasion. This is a candid opinion and an absolutely frank one. If I had answered this question in August, without the experience I have had since August, I might have been disposed to attribute more to the lack of tentage than I do now; but I think the food, while lacking necessarily in variety, was ample. There was no day in which I had not a fair amount of food, and food which enabled me to perform my duties and get along all right. I had very few complaints from my men about the food. Most of the complaining in regard to the food was made by volunteer troops without the Western experience which we had all had in the Regular Army. The difficulties in getting food to the army were of such an almost insurmountable character that the occasion of shortage is very readily accounted for. The roads at times were almost impassable for horses. The mud was up to the bellies of the horses. The rains occurred regularly twice a day, but even with all these difficulties we always had something, and, as I said a moment ago, I don't believe there is a man in the Regular Army, or in my volunteers, who would not be willing to go back to Cuba, and without any disagreeable recollections of the war, other than those we always have with any hard service, which we had. The success of the campaign was simply phenomenal in comparison with any other campaign made in the Tropics. Take the French in the Tropics; they had such a heavy loss they had to abandon the island; and take the losses of the English when they took Havana in 1761, and realizing then that we were in a port just as unhealthy as Havana, we took it and got out after all with but a very insignificant loss of men. I think the facts justify us in saying the campaign was absolutely successful and the loss insignificant in comparison with the results.

Q. You might number how many you had and how many you captured.

A. We landed with—I never did know how many we had—in the neighborhood of 15,000 when we landed. The campaign was a rapid campaign, and while it has been criticised in some quarters, I think that is the reason we got out so successfully. The Spaniards were whipped off their feet, and they were whipped with such quickness that it knocked the heart out of them. The loss does not compare with a skirmish in the last war. We lost what was hardly a morning's loss in the civil war, yet it caused the surrender and evacuation of an army of 25,000 men.

Q. You captured how many?

A. Between 23,000 and 24,000 men. In the city about 12,000 men.

Q. In addition to feeding your own troops, you had to feed these men?

A. Yes, sir; the feeding of them was done by the commissary officer, but the general discipline of most of them came under my control. They were in the city, many inside the limits given as the limits of my command when I first took charge of the city. I had entire charge of all the sick, the feeding of the sick and the supplying and military administration of their hospitals, and I knew their sick to be at one time 3,127, I think—between 3,100 and 3,200.

Q. Did they have good doctors?

A. They had excellent doctors. In fact, they had a big hospital, which we are

occupying almost without change. It is well shaded by trees, and it was well adapted for the purposes of a military hospital. We have taken it with but very little change, excepting the plumbing, in which our ideas are in advance of theirs.

Q. You might state what you took to them.

A. I furnished them with their rations and inspected their hospital on an average of twice a week. They had their own medical staff and nurses, who were Sisters of Charity, and the administration of their hospital was perfectly satisfactory. They had a sisterhood of forty sisters of some religious order, and the men seemed to be happy and well cared for.

Q. Did you also feed any body of Cubans?

A. I fed at that time practically all the inhabitants of the city. We issued 15,000 to 18,000 rations a day, which was just after the return of the exodus of Caney, and the death rate was 183 to 200 a day.

Q. We have had a great deal of evidence here with regard to refrigerated beef and tinned beef. You were both a medical officer and a commanding officer. Will you tell us about that beef, if you know?

A. We have had no trouble really with refrigerated beef on the island of Cuba where it was used under the conditions for which refrigerated beef is intended—absolutely none. Beef has arrived in good condition (I will make one exception, the cargo on the *Port Victor*—the refrigerator apparatus broke down). It has generally been excellent, and whenever used in the manner for which refrigerated beef is intended—that is, a point where the meat can be sent to them and eaten within thirty-six hours—it is practically good. The great trouble with beef there was due not so much to the character of the beef as to the ignorance and superstition of a good many men. The average soldier does not like anything that is at all mature in the way of meat—that is, the meat we would get at hotels, for instance, as in the best condition for consumption, they would regard as too old to eat. A great deal of this refrigerated beef came down, and when taken out there would be a slight bit of mold on it, and you could scrape that off or wash it off with salt and water and then have good beef. I have used it in Cuba ever since I landed in my own mess, and used it in my family, and that is as good a recommendation as I can give it. The Swift people have built a large storehouse, holding 190,000 pounds of beef, and Colonel Wilson, the commissary, has had the railroad company construct small refrigerator cars, and they haul the beef to all points on the road where we have garrisons; and since I have been in command, the 8th day of August, there has not been a single complaint about the refrigerated beef. The cause of complaint during the campaign was that the beef got in there in hot weather, when it rained twice a day, and the roads were almost impassable. This beef would be unloaded in good condition, and it would have to be taken out of the ships during the night in order that the refrigerators might be opened at the coolest time of day, and brought there at 5 o'clock in the morning. The wagons got there at daybreak in such great numbers that they would not all be loaded until 12 o'clock. In the meantime there would be a shower, and then the sun came out, and it would be between 1 and 4 o'clock in the afternoon when they got their meat, and the meat would "break down." The frost would thaw out of it and it would get a little soft, but if they ate it that afternoon it would be all right, but if kept until the next morning the meat would look suspicious. That was not because the meat was poor, but because we had not the means of handling it.

Q. If bad beef was issued they were not compelled to take it?

A. No, sir; boards of survey promptly rejected it.

Q. You then got something else?

A. Yes, sir; could get bacon. From the time we captured Santiago we had unlimited rations. We had 1,200,000 captured rations to begin with, which we captured from the Spaniards. They left the city full of food. The popular idea that Santiago was devoid of food is not true.

Q. General, you have had considerable experience in medical matters?

A. Yes, sir; the usual experience of anyone. There is a popular idea that there was a shortage of food in Santiago when we captured the city. There was a shortage of meat, but there was a great quantity of rice. We have not yet exhausted the supply of rice that the Spaniards surrendered. There were 3,000 sacks, and thousands of pounds of coffee and large wholesale storehouses in Santiago. When I opened them up their warehouses were stocked with flour that appeared from the marks as having been there during the entire war. The Spaniards did not surrender because out of food or ammunition, as was reported by some.

Q. I suppose you issued or had issued in your command a very large quantity of refrigerated beef?

A. We are supplying the troops in Santiago, five, and at one time six regiments—five right along—three negro regiments and three white.

Q. Having used it in your own family and in your mess you would be able to tell us whether any that you have ever seen was chemically treated?

A. I have never had even a suspicion of such treatment. It has never been suggested to me in Santiago in any shape or form.

Q. Have you ever noticed anything peculiar in the beef?

A. Never. The beef, as I have stated, whenever it has arrived in Santiago under normal conditions, that is, when the contractors bringing it have kept up their refrigeration, and when we have had the means of handling it, has proved not only satisfactory, but eminently satisfactory. When we use native beef there is always an objection among the officers. They don't want the meat.

Q. You had your family with you at Santiago part of the time?

A. They have been there two months. We have been using refrigerated beef right along. There is no difference in the temperature between summer and now, hardly. The only difference is we have no rains now.

By Governor WOODBURY:

Q. You spoke about the beef thawing out. Do we understand the beef was frozen?

A. I don't remember exactly the term. The butchers call it "breaking down." That is, after being frosted or chilled, it had a certain rigidity, and after that it would be flabby but in no way injured. These refrigerator boats run 36°, 38°, and 40°.

Q. We have testimony here in regard to a board of survey, and a second board of survey, of which you were a member and investigated some of the beef there?

A. Yes, sir; one case. I think that is the beef that came in the *Port Victor* when her refrigerating apparatus broke down, and the temperature of the beef had run up into the 40s—45 or 46—and we had it in the warehouse on the dock, that is, a cold-storage warehouse. There was a good deal of complaint about it, and one board condemned the beef. The next day General Lawton and I went down and inspected it, and there were some other inspectors, Captain King and Colonel Osgood. We had several quarters brought up. Some we found in bad shape. That is, the mold had penetrated one-eighth or one-sixteenth of an inch and gone into the folds under the shoulders and places of that sort, but even that meat, when you got down to the center, was good and we estimated that we would allow I think it was 20 per cent for wastage. We sent it out to the troops, but the commanding officers refused to receive it. The beef was all right, but you can not make the fresh enlisted men understand that the mold is not an injurious thing. He looks at the moldy meat and says, "It is rotten meat," yet it is good meat. I think that we let them reject that meat and throw it out, and gave them something else in place of it. The men were not forced to take the meat. They could have bacon or anything else.

By Colonel DENBY:

Q. Do you know anything about tinned meats?

A. No, sir; we had in our brigade almost none. We used bacon. I don't think we had any during the campaign.

Q. Prior to the war, did you use tinned beef?

A. The only beef I knew of was Armour's, in oblong boxes.

Q. You inspected this refrigerated beef. If there had been any chemical in it you would have found it out?

A. I think so. I might have overlooked it, but this question of chemical treatment of the beef had never occurred to me and had never been mentioned to me. The first I heard of it was in the papers here. I didn't inspect it in that way.

Q. I ask you a professional question. The statement has been made here that the meat contained boracic acid, decomposed, also salicylic acid, and also nitrate of potash. Did you find any of those things in that beef?

A. No, sir; we made no analysis, but—

Colonel DENBY (interrupting). These other gentlemen had no analysis either?

WITNESS. They could not be positive without an expert analysis. A man might say that sort of thing, but it would require a chemical expert analysis to detect those things.

Q. Did you ever use tinned beef in the Army before the war?

A. No, sir; I think that that beef had been introduced since I last served in garrison, which was in 1893 to 1895, at Fort McPherson, and I came to Washington, and was not in touch for two years with the Army. We always used Armour's canned beef in cans.

Q. I think there has been no objection made to canned beef, but what is called the boiled or roast beef?

A. I have not had any experience with that beef. If I did have it in the brigade I never had any complaints about it.

Q. If this fresh beef did decompose and become spoiled it would show that the preservative agents that had been used had no effect, would it not?

A. It would show either that or that it was used in an insufficient amount to be of permanent value. The beef—if there had been any decomposition of beef, we could have detected it by the odor, but this beef we were speaking of a moment ago—this beef that we were speaking of which was issued a second time—I remember a butcher had a long knife and ran it into the quarters, and he would say "Just smell that knife," and that meat was sweet. There was no odor; it was simply the mold which gave the meat an ugly appearance. The meat is usually trimmed; you take the quarters and you can peel off with a knife a layer of infinite thinness, and under that there is good meat.

Q. On the tinned-beef question you can not make any statement at all?

A. We had some sort of tinned beef going from Tampa to Cuba. I didn't know whether that was tinned beef or roast beef. There was no complaint about it. The men said it was flat. There was no complaint about it. We had hardly a sick man in our regiment when we landed in Cuba. It was quite a long passage—about fourteen days on the ship—and naturally, eating hard-tack and beef, we had very limited cooking facilities, about all we could do was to make coffee and soup, and the men got tired of the rations, just as we would get tired of turkey for fourteen days.

Q. You made a general statement that the affairs were conducted well. I would like for you to specify with regard to the movement from Tampa when General Shafter went to Santiago. What have you to say as to the movement, as to the ships being provided, as to proper transports, or anything else in connection therewith?

A. Well, I think you all know there was a good deal of congestion, a good deal of congestion. There were 10,000 to 12,000 men embarking hastily on a long, nar-

row pier, with rather limited facilities for handling them. There was a good deal of congestion and hard work and a good deal of swearing. I have seen just as much congestion out West. We had to hustle up our regiment and get aboard, but everybody was doing the same thing and there was confusion there. I am not prepared to criticise that at all. I do not think it is fair. I think we can only judge that campaign by what we did. The more I think of it the more I am inclined to look at it in that way. I do not think it would be fair for me to criticise the officials handling that expedition unless I had a previous opportunity of seeing what facilities they had. We all got on board with the loss of no material, and we all went to Cuba without any sickness, and we all got through the campaign successfully.

Q. You whipped the enemy?

A. We whipped the enemy, and that seems to be what we went for. It didn't compare in severity or hard work with what General Lawton and I had on the Yacuy River, where we had bacon and hard-tack, and we got out of that all right. We used to complain bitterly about not having things to eat.

Q. You regard these hardships as incidental to the life of a soldier?

A. I do, and those who are not prepared to accept them had better leave the Army.

By Dr. CONNER:

Q. Up to the 15th of August how were you supplied with medical officers—the command in general?

A. There were originally enough medical officers provided, but possibly people lost sight of the fact that some medical officers were going to be taken sick, as well as others; and out of the three regimental officers, if they lost one, of course there is one-third of your working force gone. In that way there was a shortage, but afterwards we had less sickness. In fact, now the island of Cuba is flooded with doctors. The short of the story is that medical doctors were working as hard as they could and doctors were overworking, and there were days when men could not get a doctor; but I do not think there is any cause of complaint about the doctors. My observation was that they worked with perfect devotion. They did everything that man could have done. The results show it. The loss of life is perfectly insignificant. I have no doubt that Private Jones and Private Smith some days could not find a doctor, but the general results were fine.

Q. What was the condition as to the department as respects supplies before the 15th of August?

A. I do not know; candidly, I do not know anything about it. I was entirely out of it, and I was, in my position, sensitive about interfering. I did not want to say anything to medical officers, as taking advantage of my former training. Out of a brigade of 1,400 men in a few days we had 860 sick, all of whom were saved without the loss of a life. The medical service must have been pretty good. It was pretty hard to get around and see all the sick men. Some fellows complained that they ought to have been seen sooner. There were no complaints by old soldiers, and I will say there were no complaints by anyone to amount to anything.

Q. Did you hear from your medical officers that medical supplies and medicines in part were short there?

A. I did, sir; but I do not know whether it was so or not. We heard they were on the ships and could not be gotten out. Unless you have been off the coast of Cuba—imagine a limestone coast with perpendicular walls and a rough surf rolling in. It is not hard to imagine what the landing of an army is. The work—foreign attachés said, "You Americans have done wonderfully. If we had not seen it we would not have believed it." Padget and Lee said that, and Van

Goetchen, "You have done what seemed to be impossible." I think with that record behind us we can feel fairly well satisfied that the result must have been good.

By Captain HOWELL:

Q. I want to ask you in regard to the transports. You were put on board the transports at Port Tampa?

A. Yes, sir.

Q. What was the condition of those transports?

A. Absolutely clean and in perfect order to receive us.

Q. Were they sufficient for the number of men to be transported?

A. The ship I went on we had put on eight troops of cavalry, four companies of infantry, and a band, and afterwards they took off two companies of infantry. The ship was crowded and we kept her perfectly clean. We had room enough to have company and troop drill and manual of arms and firing drill. I took and knocked out the boards and put in gratings. We had this grating piled up in the day for exercise and drilling, but put them down again at night. We got over there without sickness. I don't know how about the other troops.

Q. Are you acquainted with the conditions that existed when the troops left Siboney and Santiago with sick and convalescents coming back?

A. I knew nothing about them until several weeks after I was placed in command of the city. Then I made it a practice to go aboard them and inspect them, because I had simply an enormous amount of all sorts of delicacies—barrels of preserves and almost thousands of Red Cross cots; and I also went aboard or sent my adjutant; and if we found fellows there half dressed, I gave them pajamas and cots and things of that sort. Men lost a great deal during the war—lost their clothing—and then went aboard these transports on their way home with practically nothing but a suit of clothes, in a pretty destitute condition. I don't think there was any physical hardship about it. Whenever we found anything of that sort, we tried to fix them up.

Q. All complaint is about vessels leaving prior to the occupation?

A. I was only at Siboney once since that time.

Q. You don't know anything about the condition of the *Seneca*?

A. No, sir; I was up in the country at Santiago, and I went back to get some ammunition, and that was the only trip I made to Siboney until after two months, and then I went down to look the old road over.

Q. I don't think there is any complaint about these transports since the occupation of Santiago. You did make it your business to inspect all the transports?

A. I do it up to to-day. I don't allow them to sail until they get orders from headquarters and report that they are all right.

Q. To see that they have ice and fresh water?

A. It is the duty of the captain on board, and we ask him if he is supplied with medicines, food, and water, and if prior to sailing there is any reason to suppose that he is careless, either he or I or a surgeon go aboard and look the ship over. I came up on one the other day and had a pleasant trip up, and walked through the holds and asked the men if they had any complaints to make. They said it was a little cold, but that was all. They are remedying that as far as possible by furnishing new transports specially fitted up.

By General McCook:

Q. Did you know when you went down to Tampa to embark what vessel you were going on?

A. No, sir.

Q. How did you first find out what vessel you were going on?

A. I found General Humphrey, and he didn't know what transport we were to have, and I said, "We must go on some transport;" and he said, "There are three

or four out there in the stream. There is the *Yucatan*; you can go on her if you can get her." I went out with Colonel Osgood—you know there were lots of regiments there and everybody wanted to get the best ship for his men, and they were trying to get assignments to all the good ships. My recollection is, I got into a rowboat with Colonel Osgood and rowed out—the thing made so little impression on my mind. I got aboard her and said, "This transport is assigned me by order of the commanding general." Captain Capron and Roosevelt came aboard, and I said, "Captain Capron, go and get your men as quick as you can and get your men aboard the ship as soon as possible." She was a desirable ship, and we got our men aboard, and afterwards came some little controversy—not controversy, but there were three or four regiments wanted to embark—and we got aboard and got aboard four companies of infantry and she backed out into the stream. If we had sat down on the dock and crossed our feet and waited to be put on board, it would have been some time before we would have gotten a transport, and everybody got one. We got an unusually good one by being a little bit energetic, and there has been a little criticism of the fact that transports were not assigned; but maybe they might be right or wrong.

By General WILSON:

Q. This was not a seizure of the ship? He told you you could take the *Yucatan*?

A. He didn't tell me I could take the *Yucatan*. He said, "You can take any one out there." The *Yucatan* was a good ship, and I said, "I take this ship under command of the commanding general." He said, "All right; glad to see you aboard." He said, "You have a right good ship." It was just a case—if you were taking your regiment and going aboard a train, you would try to get the best part of the train.

By General MCCOOK:

Q. In Arizona you would call it hustling?

A. Yes, sir.

By Governor WOODBURY:

Q. We have testimony that that boat was assigned to your regiment before the regiment even reached the point. Are you prepared to say that that assignment was not made by Colonel Humphrey or General Shafter before you reached Port Tampa?

A. I know nothing beyond what I told you. It may have been assigned. It may have been all written out and ordered, but what I told you took place as nearly as I can recollect. I went to General Humphrey and he was surrounded by a number of men. The tempers of the men were not calm, and there were, I suppose, twenty regiments rushing up there for transports. He pointed at this transport and he said to me to "get one of those transports; there is one coming in now." I didn't know it was the *Yucatan* until I got aboard her, but it was a good ship and I picked her out.

By Colonel DENBY:

Q. Have you anything further to say?

A. I have no personal complaints to make of any kind as far as my connection with the Army goes. My supplies have been sufficient to accomplish the ends I have been sent out to accomplish, and everything has been, when you consider the circumstances under which we labored, eminently successful and satisfactory.

Q. You have always been supported by your superiors?

A. Always. I have been absolutely supported in every way. I have had no trouble of any kind.

Q. Is there anything further you would like to say, General?

A. Nothing whatever.

WASHINGTON, D. C., *January 13, 1899.***TESTIMONY OF MAJ. GEORGE W. RUTHERS.**

Maj. GEORGE W. RUTHERS appeared before the commission, was sworn, and testified as follows:

By General McCook:

Q. Where have you been serving during the war with Spain?

A. I came from Fort Russell with my company—in command of it—to Chickamauga Park. I was first stationed at Fort Russell, and came to Chickamauga Park in command of my company. Then I was assistant muster officer of the Georgia Volunteers, and I went to Jacksonville, Fla., on General Burt's staff.

Q. You were depot commissary at Jacksonville first. Was that your first station?

A. I was assigned to the depot at Jacksonville in August.

Q. Did you have any occasion to handle refrigerated beef?

A. Yes, sir.

Q. What quantity?

A. I could not tell the exact quantity at Jacksonville, but altogether I have handled 3,000,000 pounds.

Q. What condition was that meat in that you examined and issued at Jacksonville.

A. I regard it as good as could be obtained in the United States.

Q. Where else were you assigned to duty as commissary?

A. At Savannah, Ga.

Q. How much of that beef did you issue there—refrigerated beef?

A. I included that in the whole amount I issued—3,000,000 pounds—by giving the number of troops I supplied at Jacksonville and those at Savannah.

Q. Did you have any complaints about this beef?

A. I had two or three times the ordinary complaint that occasionally it had become slightly tainted after being in the camp a few hours. They were little minor complaints that you would find, not only in time of war, but in time of peace.

Q. Did you ever hear of any embalmed beef being issued out there to the troops at your depot?

A. No, sir; never heard the word used until I saw it in the paper.

Q. Have you had any experience with canned roast beef?

A. Yes, sir.

Q. What has that been?

A. I had in my depot at Jacksonville about 750,000 pounds of it, and in movements of 31,000 men I supplied them with this beef. When I did so I requested the regimental commissaries to report to me if they found a single can of it bad; and no report or complaint was made about it.

Q. Did you understand this roast beef—canned roast beef—to be a part of the permanent ration, or as an emergency ration?

A. I understood it to be a ration for this purpose: to take the place of fresh beef when fresh beef could not be supplied; that is, when refrigerated beef or beef cattle could not be supplied.

Q. How many—can you state approximately the number of cans you issued to the troops?

A. [Figuring with paper and pencil.] About 250,000 pounds.

Q. You say you never had any complaint in regard to it?

A. No, sir; I never did.

Q. Was that canned beef known as an emergency ration or part of the permanent ration?

A. I never heard that term applied—whether it was emergency or part of the regular ration.

Q. But only to be issued when the fresh beef was not obtainable?

A. That was my understanding.

Q. Did you ever have any suspicion that this canned beef was treated chemically in any way?

A. No, sir.

Q. Or refrigerated beef?

A. No, sir.

Q. What is your opinion about it?

A. Well, I do not think it has. I can probably give you a better explanation in my own way about the canned beef and refrigerated beef, too. When the troops first came to Montauk Point, I had been issuing the canned beef to all the troops going to Cuba. In fact, I supplied all the troops going to Cuba. Every soldier now in Cuba I supplied from my depot, except those around Santiago now, and one regiment there I supply. I never heard anything about the canned beef at my depot until the troops went to Montauk Point; then we stopped the meat as travel ration. I expressed surprise then to the Commissary-General, because I had already shipped away over twelve or fifteen thousand of this ration and had no complaints about it, although I requested the commissaries to report about it. Then came, from the reports made at Montauk, instructions to examine the roast beef I had on hand, and I opened up, at random, the different cases—a can here and there—and although I have been beef inspector on the Indian campaigns I took a beef inspector with me, a man who had served in Chicago as beef inspector for ten years, and I destroyed 100 pounds of this beef in making the inspection. I found the beef, in my opinion, of superior quality; and in making the inquiry about it at that time I found the beef was bought up at the time of year when they were using feeders. All the beef I used was Armour's beef. I never used any of the others. Four or five packers, of course, furnished beef, but all that has been in my hands has been the Armour brand. I reported what I had found, and I considered the beef of good quality, and that is all I ever heard about it there.

Q. Have you anything you would like to state in regard to this beef that you have not been questioned upon?

A. No, sir; I do not see how the Department could have done better. I went on this principle: On the principle, as a line officer, the duty of every commissary officer was to the troops first, and nothing should go into their hands except the best food the United States could give them; and if any food had come into my hands that I thought was not suitable—that I would not eat myself—I would have condemned it in the storehouse. I think the Commissary-General encourages this with all the officers. Not an ounce of food went into the hands of troops that was not in first-class condition, the best that money could buy, that was not reported to the commissary officer.

Q. Did you ever make any contracts for beef or commissary supplies?

A. Yes; I make them all at my depots.

Q. Have you ever been interfered with by any one superior in authority to you in regard to making contracts?

A. None in the least; I am absolutely independent.

Q. And your contracts are made in accordance with law?

A. Yes, sir.

By General WILSON:

Q. In your experience, as I understand from your caliber, it has been greater than the general run of officers of the Army in knowing the absolute requirements of enlisted men. I think you came from the ranks?

A. Yes, sir.

Q. And you had been an enlisted man in other regiments?

A. Yes, sir.

WASHINGTON, D. C., *January 13, 1899.*

TESTIMONY OF RODERICK SCOTT.

Mr. RODERICK SCOTT appeared before the commission, was sworn, and testified as follows :

By Colonel DENBY :

Q. State your name, residence, and occupation.

A. Roderick Scott, Omaha, Nebr.; occupation is that of manager of the beef department of the Cudahy Packing Company.

Q. What business does that company do ?

A. It does business in dressed beef, pork, canned meats, etc.

Q. Canned beef ?

A. Yes, sir ; canned beef.

Q. What is about the amount of business it does during a year ?

A. Last year their sales amounted to \$30,000,000. We slaughtered, in round numbers, 225,000 cattle.

Q. Where do you send the products ?

A. The beef mostly in this country, and canned meats to England and the Continent. Some is reissued from there to South Africa and some goes to Germany.

Q. I don't want to take up your time or our time unnecessarily. I presume you do your killing, and packing, and everything that you do, about the same as Swift & Co. and Armour & Co.?

A. Yes, sir.

Q. Have you Government inspectors ?

A. We have.

Q. How many ?

A. There are Government inspectors in the yards—I do not know the number—and we have two Government inspectors in the house.

Q. The proof before us has been that the meat was inspected before killing and after ; is that the case with you ?

A. That is the case with us.

Q. And the meat is refrigerated?

A. Yes, sir.

Q. And put in cars and tagged and sealed as is generally done?

A. Yes, sir; and shipped to the different points.

Q. Now, do you, in preparing that refrigerated beef for the market, use any chemicals?

A. None whatever.

Q. Do you use boracic acid?

A. No, sir.

Q. Salicylic acid?

A. No, sir.

Q. Nitrate of potash?

A. No, sir.

Q. Do you use anything—

A. Nothing whatever put in the beef except water.

Q. In the preparation of tinned meat is there anything else used?

A. None whatever.

Q. Then you supplied meat to the Government?

A. Yes, sir; we supplied to troops at Jacksonville.

Q. About how much did you supply?

A. About 138,000 pounds.

Q. Have you had any objections as to the character, soundness, or purity of your meat?

A. No, sir; we have not.

Q. Can you tell us how much of the tinned article you supplied?

A. 3,750 cases.

Q. Containing how much?

A. They were different sizes; some 2 dozen 2-pound cases and some 1-pound cases.

Q. What was the character of that meat?

A. Canned roast beef.

Q. From what part of the animal do you take it?

A. That is taken mostly from what is called the plate and chuck and shoulder and breast.

Q. And the other meat is the hind quarter?

A. The other is the rib and loin and round.

Q. Have you sold to any Government in Europe?

A. No, sir; not within the past year.

Q. Who do you sell to in Europe?

A. We ship to our agents on consignment.

Q. To what points do you ship?

A. Liverpool and Glasgow.

Q. None on the Continent?

A. Some on the Continent.

Q. Where?

A. Berlin.

Q. Have you had any complaints as to that?

A. We have had no complaints within the last year.

Q. How long will that meat keep?

A. As long as the can will hold together. We use the very best quality of tin and all our cans are soldered on the outside.

Q. You find sometimes defective cans?

A. Yes, sir; occasionally.

Q. You have eaten this meat yourself?

A. Yes, sir; frequently.

Q. Found it what—good or bad?

A. Found it quite good.

WASHINGTON, D. C., *January 13, 1899.*

TESTIMONY OF MAJ. JAMES M. ARRASMITH—Recalled.

Maj. JAMES M. ARRASMITH was recalled, and testified as follows:

By General McCook:

Q. Major, you have been examined already by this commission?

A. Yes, sir,

Q. At what point?

A. At Chattanooga, Tenn.

Q. What is your position there?

A. Depot commissary and chief commissary.

Q. About how many pounds of refrigerated beef did you issue?

A. Approximately 5,000,000 pounds; probably a trifle over that.

Q. Has your attention ever been called to the question as to whether or not that meat had been chemically treated?

A. I had never even thought of such a thing until one day, I think, about the latter part of September—sometime in September—Colonel Maus made a remark to me on the train, asking if I had heard anything about chemicals being used in that beef.

By Captain HOWELL:

Q. State who Colonel Maus is.

A. He is serving as lieutenant-colonel on the major-general's staff.

By Colonel DENBY:

Q. What time in September was that?

A. I could not state positively. I think it was about the middle or latter part of September.

Q. That is the first time you ever heard the question raised by anybody that this meat was chemically treated?

A. Yes, sir.

Q. Well, you have issued a great quantity?

A. Yes, sir.

Q. What did you tell the man?

A. To the remark Colonel Maus made I said, "I have never heard of such a thing, Colonel."

By Captain HOWELL:

Q. Did you state to us what he asked you?

A. Yes, sir. "If I ever heard anything about chemicals being used." I said I had never heard of such a thing, and the meat at Chickamauga had been excellent, and that I knew absolutely nothing about it and never even heard of it, and could not see the necessity for it, and the matter was not discussed at any length at all, and I really attached very little importance to it, and heard nothing more about it until I saw something in the newspapers about it.

By General McCook:

Q. Who accompanied Colonel Maus on that occasion?

A. On the train?

Q. Yes, sir; at Chickamauga—who was there with him?

A. There were Colonel Maus and Captain Morton and Captain Daly. They were making an inspection of an immune regiment.

Q. Who was Captain Daly you spoke of?

A. Major Daly; I stand corrected. He is a surgeon, United States Volunteers.

By Captain HOWELL:

Q. W. H. Daly?

A. I don't know his initials. He was Major Daly, assistant surgeon-general.

By Governor WOODBURY:

Q. Chief surgeon?

A. He was on the general's staff.

By Colonel DENBY:

Q. Were you still stationed at Chickamauga when you had this conversation?

A. Yes, sir.

By General McCook:

Q. Did Major Daly hear this conversation between you and Colonel Maus?

A. No, sir.

By Colonel DENBY:

Q. Did you have any conversation with Major Daly about it?

A. None whatever.

Q. When you told Colonel Maus that you heard nothing of this and that the meat was good, was that true?

A. Absolutely true.

Q. Did you have any complaints about the meat?

A. None whatever.

Q. How about the tinned meat?

A. Never had a complaint about that.

Q. How much tinned meat did you issue?

A. We had about 500,000 rations of canned corned beef. I kept from 300,000 to 400,000 rations on hand until the army left Chickamauga, and I never condemned a pound of that and never found a case of it that had deteriorated in any manner. I only handled a very small quantity of the canned roast beef. It was not sent to me by any of the commissaries—depot and purchasing commissaries—but there was a small quantity turned in by the First Georgia Regiment. I remember it distinctly, because it was the only roast beef that we had at Chickamauga. There were 144 one-pound cans and 24 two-pound cans, and this beef was turned in to the commissary and sold almost immediately.

Q. What do you mean by turning into the commissary?

A. This Georgia regiment came to Chickamauga from a camp in Georgia, where they had been supplied with quite a large amount of subsistence stores—stores for sale—and when they arrived at Chickamauga, there being a depot commissary there—a sales room—they did not have this commissary in the regiment, and so they invoiced these stores to me.

Q. Had these stores been supplied by the State or the Government?

A. By the Government. The minute this canned roast beef was sold or issued for sale to the brigades—almost immediately it was all used, and I never had any complaints about it.

Q. Is that all you handled?

A. All the roast beef, yes, sir. That was the Armour beef.

Q. And you say no complaints were made about it at all?

A. None.

Q. Was it consumed?

A. It was sold for consumption.

Q. Who was it bought by?

A. The officers in command of the men.

Q. Do you know whether any of that tinned beef was ever treated chemically by any boracic acid, salicylic acid, or nitrate of potash?

A. I know absolutely nothing about it.

Q. Did you ever eat it yourself?

A. Yes, sir.

Q. How did you find it?

A. Very good.

By Captain HOWELL:

Q. I want to ask you in regard to the 5,000,000 pounds of refrigerated beef. You had supervision of the quality of that beef—you inspected it?

A. Yes, sir.

Q. You had a refrigerating place to put it when taken out of the cars, or was it issued from the cars?

A. It was generally issued to the brigade from the cars, in order that the issue might be made as quickly as possible, so as not to keep the car open any great length of time in that hot climate. Then the necessary amount of beef for the smaller issues of hospitals and the ambulance companies and civilian teamsters, etc., were issued from the cold-storage plants, so that the cars might be closed and the meat preserved as well as possible. A large portion of it was issued from refrigerated cars and the smaller issues from the cold storage.

Q. From your information, derived from the inspection of this beef and your knowledge of the same kind of beef in the cities of the United States, was it the same kind?

A. The same as furnished.

Q. And is how?

A. Excellent, good as any I have ever seen in my life.

Q. Did not the men commend it and state it was better beef than they were accustomed to?

A. It was the admiration of everybody who saw that beef. There were many people who came to look at the Government storehouse, from the Major-General Commanding down to civilians, and it was the admiration of everybody—the beef that was furnished by the different contractors there. Armour furnished beef for a while, when the regular troops were there. Nelson Morris & Co. furnished beef during a large portion of the time that volunteers were there, and are furnishing it now; but when the army went away there was only a regiment or a regiment and a half left, so they did not ship in car-loads from Chicago, but they authorized their agents to purchase in the open market the same beef that was used for the trade for the hotels and establishments, people of Chattanooga, right from the Swift refrigerator plant in Chattanooga. They have had a plant there for several years. I went down and inspected the beef in the Swift plant and inspected it when it came to Chickamauga, and it was as fine beef as I ever saw in my life.

Q. As an officer, didn't you hear a great deal of comment by soldiers and men, and didn't they claim they had as good beef, and particularly, as any city?

A. Yes; and I will state that the regular troops were agreeably surprised at the magnificent beef that was furnished, for at many posts in the country the beef is furnished by local contractors—it is local beef—and in my opinion the refrigerated beef furnished there was the Government-inspected beef, with the Government tags on it, and superior to anything I ever ate before.

By General McCook:

Q. How often did you inspect this beef a day?

A. From two or three times a day to a dozen times. I would go when cars came in to inspect that. I inspected cold storage. I would go at the time of issue, and frequently when I was not busy, during the rush there, all the way from three to eight or ten times a day I was at the beef house. I looked after that carefully. I exercised a close and careful supervision over all the matters pertaining to my department there.

WASHINGTON, D. C., *January 14, 1899.*

TESTIMONY OF MAJ. H. H. CARLETON.

Maj. H. H. CARLETON then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by the recorder of the commission.

By Captain HOWELL:

Q. Will you state to the commission your rank in the United States service?

A. I had the rank of major and inspector-general.

Q. When were you commissioned?

A. I think on the 16th day of June.

Q. Where were you ordered?

A. I was ordered at first to report to General Brooke, at Chickamauga, and when so reporting was ordered by him to report to General Wilson, and became inspector-general of his division, which was First Division of the First Corps.

Q. How long did you stay at Chickamauga?

A. I can't state accurately, but some two weeks or more.

Q. You went from there where?

A. To Charleston, and from there to Porto Rico.

Q. About what time did you arrive at Porto Rico?

A. We arrived there I think on the 28th of July. I will refer to my report and give you that date exactly. We arrived at Port Ponce on July 28.

Q. Just briefly state now your landing, and how long you were on the island.

A. Well, sir, we were ordered to land at Guanica, but by some misapprehension or mistake of orders we were about thirty-six hours out of the regular time in reaching there. When we hove in sight of the harbor at Guanica we were signaled to cast anchor. During the night we were ordered to sail at 4 o'clock in the morning and report at 7 o'clock at Ponce. So at 4 o'clock the next morning we set sail and made for Port Ponce, and when we got in sight of the port I think it was the war vessel *Massachusetts* that signaled to General Wilson that the Spaniards had fled the city, and so there would be no difficulty about landing. We had expected when we got there that we would be very vigorously opposed in our landing, and we had made provision to effect the landing at whatever the cost might be, but on receiving this news from the *Massachusetts* General Wilson left the vessel and went ashore immediately. We remained twenty-four hours preparing to unload, etc., and then followed him.

Q. Did you have a comfortable trip over from Charleston to Porto Rico?

A. Quite so, indeed.

Q. The transport was in good condition?

A. Yes, sir. My being inspector-general made it my duty to inspect the vessel almost continuously, twice a day, morning and afternoon.

Q. What was the name of the transport?

A. The *Obdam*. Captain Ayer was in command. His vessel was in fine condition, in spite of that crowded condition of the vessel by reason of the large number of troops we carried.

Q. How many troops were on board?

A. The Second Wisconsin, and General Wilson's staff, including the officers, and perhaps some fragmentary organizations. But so well was the vessel provided for that trip, with the aid of the captain, who was a very efficient officer, that the vessel was kept remarkably clean, so much so that I thought it my duty to embody that in my report to the Inspector-General. And reference was specially made to Captain Ayer, and the condition of his vessel. And then we had a magnificent sea, almost like sailing over a lake; there was no rough sea at all.

Q. Now, how long were you on the island of Porto Rico?

A. Pardon me for referring to my report so as I can get the exact dates. We left there on the 8th day of September and landed in New York City on the 15th of September. That will give you the length of stay on the island.

Q. You had an opportunity to examine carefully, as inspector-general, all the food that was furnished to the army in Porto Rico?

A. Oh, yes, sir; that was made a part of my duty. Major Varnedoe, the commissary of the division, being a native Georgian also, we messed together and were continually together, and under the orders issued from the War Department my duties were to look into everything connected with the army, particularly the quartermaster's and commissary department, and particularly the sanitary conditions.

Q. I want to ask you a few questions. You have studied medicine?

A. Yes, sir.

Q. And you have been in your time a practicing physician?

A. Yes, sir; I practiced medicine about ten years in all, possibly a little longer.

Q. You have had some military experience prior to this?

A. About four years under General Lee, in the Confederate army.

Q. Tell what your rank and command was.

A. Commander of a battery during the war, called a troop of artillery in the organization of the army, but known as "Carlton's Battery" of Longstreet's corps.

Q. I have only asked you these questions, because I thought it would let these gentlemen know that you were a pretty good judge of food, although you didn't have much opportunity some of the time. With your knowledge as a physician and a soldier, I want you to give your opinion of the food furnished to the army generally at Porto Rico. I want you to commence with the general ration and state whether that was issued there as prescribed by the regulations, and the condition of the canned beef and the refrigerated beef that came under your inspection and your knowledge. What was the kind of beef furnished by the Commissary-General of the Army?

A. So far as my inspection went on board, and we carried our supplies with us largely, they were, as I thought and as I have stated in my annual report, rather above the usual ration issued to an army. It was very good, indeed, sir. We used it on board the boat, both the refrigerated and the canned meats, and we thought it was very good, and that which was issued to the troops in Porto Rico, as far as my inspection went, sir, there could be no fault found with it. Of course, I do not mean to say, here and there, you could not find a faulty can. Of course, I suppose that can be found in any large quantity of meats. I used that meat at home, such as Armour's, etc. I keep them in my pantry, or my wife does. I suppose you would find occasionally a bad can, but taken as a class, it was good, sir. Under the authority given by the Commissary, we purchased those things from our commissary and ate them, and then where a little care was taken in their preparation I know we could make an elegant hash with those canned meats.

On one occasion I was going with the colonel of the Second, or perhaps the Third, Wisconsin through the camp. I was interested in the mode of cooking more than in the rations at that time, and in passing one of the camps, the company cook was preparing out of these canned meats a dish which attracted my attention very much. It had a very fine aroma, and we stopped as it was being dished out to the company, and the colonel requested the captain to send up a dish of that to his tent, and after we got to quarters we ate it. Now, when we got there these vegetables were stored at the port; that is, the portion which was for our division. The cattle had attracted my attention; they looked very fine—even better than our Western cattle—and I said to Major Varnedoe, he being with us (he had quite a quantity of canned goods with him), "I don't think it is wise to issue these canned goods; we don't know what emergency may obtain. I see also you have a quantity of meal and flour, and I am going to get General Wilson to issue an order so you can exchange that corn meal for flour. I think you ought to issue flour almost exclusively. The supply of beef is inexhaustible; but you can buy it for 7 or 8 cents in Porto Rican money, and you can issue fresh meat and fresh bread for rations." I saw also in my inspection that the island afforded some vegetables, and I said "I think we ought to have them, as tending to a healthier condition of the troops, and keep these rations for an emergency." He quite agreed with me, and I got General Wilson to make that order, and during the remainder of our stay we relied almost exclusively upon fresh meats; therefore you will see my opportunities for inspection were not extensive after that time.

Q. But you did see the refrigerated beef?

A. Yes, sir.

Q. Now, I want you to state if you have any knowledge or heard of any instance while on the island of the refrigerated beef or canned beef making soldiers sick.

A. No, sir; I have no recollection. Would it be improper for me to state—being a Georgian, I mean what I say and I say what I mean, as I said to the Adjutant-General a day or so ago. I would like to read from my report.

Q. All right, sir; just read it.

A. Well, I speak here in this connection of the Subsistence Department. What is here said of food at Chickamauga is equally true of the same at Porto Rico: "The food supply for the soldiers at Chickamauga was not only abundant, but of unusually good quality. The men were kept constantly supplied with vegetables, fresh bread, and fresh meat. Each company in each command was supplied with ample cooking arrangements, the Buzzacott stove being used. There was no lack for cooking, and if a deficiency or irregularity obtained in properly rationing or feeding the soldiers it was due to the neglect and inefficiency of company and regimental officers. I heard of no complaints on this score and do not believe that any ground of complaint existed."

Q. That applies equally to Porto Rico?

A. Yes, sir; so far as my observations went. Of course, that was confined to my division, not being privileged to go out of my command.

Q. Did you meet with any of General Miles's staff officers at Porto Rico?

A. Yes, sir; I did. I met Colonel Michler, his adjutant, I believe, and Colonel Forbes.

Q. You heard no complaints of the refrigerated beef or canned beef?

A. No, sir; I did not. The question was not up, and I heard no complaint.

Q. Did you hear any complaint from any officer or soldier of the refrigerated or canned beef?

A. Not especially so; I can recollect of soldiers complaining; soldiers will complain; it is a part of a soldier to complain. Even the best ones will grumble, but it does not amount to anything.

Q. Did you hear of any complaint about chemicals being used in the preparation of this refrigerated beef?

A. No, sir; I never heard of it until I recently saw it mentioned in the newspapers. Now, in going into the refrigerators there was a slight ammoniacal smell that one not used to it perhaps would discover.

Q. So there was a refrigerator on the *Obdam*?

A. Yes, sir.

Q. You examined that?

A. Yes, sir.

Q. What was the condition of the beef in that?

A. Excellent; we ate it on our table every day, and thought it was excellent. We heard no complaint whatever, sir. I would sometimes see that perhaps the rations were not altogether as full as the hunger of the soldier would desire, but I heard no complaints, sir; but on the contrary, Captain, somewhat in extenso I was clearly of the opinion, having had some experience with another army, that no army ever went to war that was better provided and rationed than this army was—not only in the subsistence department, but in the quartermaster's department. There was some complaint among the soldiers about the heaviness of the uniform, but I think from my own experience, both in civil and military life, that the heavier uniform was best—that is, a medium weight—unquestionably; and if I was going to equip a company to go to Cuba or Porto Rico to-day I would use that instead of the light canvas. At Porto Rico the nights were very cool, so

much so that we slept under army blankets, and the next day it would be very warm.

By Dr. CONNER:

Q. Did you, as inspector, have an occasion to see anything of the sanitary condition of the troops of your corps?

A. I did, sir.

Q. Will you be kind enough to tell us, in brief, what the sanitary condition was at Chickamauga, and also at Porto Rico?

A. Yes, sir; that was one thing that gave us more trouble than anything else. The topography of that country—

Q. You are speaking of Chickamauga now?

A. Yes, sir. In company with the surgeon of our division I made daily tours of the sinks, and it was with very great difficulty that we got the company officers to have the fresh earth thrown in. Sometimes they let them get foul. I know I had great contests, and kept after them constantly. It was a great care and concern with General Wilson, who used to ride with me occasionally around the camps and around those sinks. The ground was flat, and the earth did not seem to absorb, but where the company officers were attentive and would, at least once a day, cover in the garbage with fresh earth the sinks were comparatively safe, but there was considerable neglect on that score.

Q. Did you find any part of that camp at any time to be filthy?

A. No, sir; not exactly. Sometimes, in passing through regiments, I have seen some companies whose camps were not in good condition, but that was only of temporary duration.

Q. Was there or was there not a decided absence of good sanitation in that camp?

A. No, sir; not so far as the conditions would warrant. Pardon me in saying I do not think it was a good camping ground.

Q. Did you inspect the hospitals?

A. Yes, sir.

Q. What condition did you find them in?

A. As well as could be expected. Just there I want to say I took issue with the surgeons, Dr. Woodbury and Colonel Huidekoper, in regard to the establishment of the division hospital. It was a new departure, and owing to the fact that the commands had gone out on the regimental hospital organization the change to a division organization caused a good deal of confusion for a time, and not in a few instances the lack of sufficient medical and nursing attention. As I said then, while there might be good arguments in favor of the division hospital, I thought it was unfortunate at that time, and the greater misfortune consisted of this army, which was made up principally of volunteers, who seemed to think their principal duty was to shoot at a mark. They didn't seem to think about their well-being in camp. The establishment of these division hospitals gave the pretense for an excuse in neglecting them in that respect, and I insisted it was best to maintain the regimental hospital, so as to bring them under the colonel and line officers. They disagreed with me, of course, and there was sometimes a crowded condition in the hospital, which was not of extended duration, however. It was relieved so far as my observation went. The supply of regular nurses was a little deficient, and I have found this—I know I had to correct it in several instances. They asked for details in the different commands, and the officers, instead of sending their very best men to the hospital, would pick out the inferior men. I know in the Fourth Illinois I had quite a contest with the colonel, who demurred somewhat to taking his best troops for hospital corps, as he said they did not enlist for hospital soldiers; he didn't bring them for that purpose. I told him it was the highest duty they could perform, and he sent the best men as nurses afterwards. Up to that time those things had been relieved.

Q. What did you find the condition to be in Porto Rico, as respects camp sanitation and hospital arrangements?

A. That being a tropical country, we had that to contend with, and we cautioned the men to be careful about their sinks and sanitation, and where the importance was strenuously impressed upon the officers they did it. We had a little more trouble in Porto Rico than at Chickamauga. That was due to the surroundings, though. We were there in the rainy season. It rained almost every hour or so, and the soil became very soggy, being porous and alluvial, and the sinks would cave, and we had to make a good many of them, and that necessarily increased the sinks around the camp, which was unfortunate. But I did not consider the conditions there, even in a sanitary respect, anything more than you might naturally expect, and one of the troubles and incidents of where a large body of troops is in camp.

Q. While in Porto Rico was your official attention called to the lack of medical supplies?

A. No, sir, not in our immediate command. I do not know about the other troops. Dr. Woodbury was a very efficient officer and I heard no complaint of lack of supplies. I suppose that he could not have treated diseases with all the appliances he had in New York or Philadelphia. I heard no complaint of medicines, and they were so much more abundant than I had been accustomed to in the former war that perhaps I thought there were plenty.

By Captain HOWELL:

Q. What time were you in Congress, Major?

A. The Fiftieth and Fifty-first.

Excerpt from the report of Major Carleton to the Inspector-General, and made a part of his testimony before the commission, at his request.

QUARTERMASTER'S DEPARTMENT.

There was no lack of supply and proper distribution on the part of the Quartermaster's Department. Transportation was ample for the troops stationed there. The tentage was good and abundant. The clothing was all that soldiers in the field could have asked for or expected. It is true that the clothing in some instances was rather heavy for the season of the year, but this was unavoidable, and I am clearly of the opinion, both from observation and experience, that clothing of medium weight, such as most of the soldiers were supplied with, is far better for the men than uniforms made of lighter or thinner material.

MEDICAL DEPARTMENT.

Owing to the unexpected amount of sickness obtaining among the troops at Chickamauga National Park the amount of medical supplies did not prove as ample as they should have been. As to medical and surgical staff, while it would be next to impossible to organize an army composed so largely of volunteer troops as was this army without having to contend with some inefficient officers, yet as a whole the medical officers of the command which it was my duty to inspect were not only efficient but faithful in the discharge of their duties. Much that has been complained of by overzealous patriots and philanthropists, as well as an unfair and injudicious press, was due, doubtless, to a change of the medical organization from regimental to division hospitals. While the division hospitals have their advantages—and in the course of time, with more experience and a more thorough organization, they may prove best—yet the change, made as it was, caused confusion, and in some instances a too great crowding together of the sick, and not always with sufficient medical and nursing attention. The greatest objection to

the change consisted in the effect it had toward relieving the regimental and company officers from a more direct and constant care of their men. Unfortunately, there is much proneness on the part of the line officers in volunteer commands to regard their principal duties to be those of seeing to the drills, practice marching, target practice, and general duties of the soldier, while this change of regimental into division hospitals furnish them with at least a pretext of excuse for neglecting that higher duty of looking after the comfort, health, and well-being of their men.

POLICE AND SANITATION.

Chickamauga National Park is not in a strictly healthy, but a decidedly malarial or miasmatic section of the country. While the sickness at this point may have been aggravated by a neglect in proper police and sanitation of the camps, yet it was more largely incident to the climate and the location, and was unavoidable, specially among troops coming from Northern latitudes. The water supply was not insufficient, but not good for drinking, save where the precaution was taken of boiling or filtering the same. The police and sanitation of the camps were not such as should have been. This was a constant care of the commanding general and those staff officers charged with the duty of looking after the same. The deficiency was hard to relieve, owing to the usual carelessness of an untrained soldiery and the inefficiency and neglect on the part of the line officers. The camps were as carefully and judiciously selected as possibly could have been done under the existing circumstances.

Accompanying Major-General Wilson, I left Chickamauga National Park July 5, 1898, and arrived at Charleston July 6, 1898. Here General Wilson, with the troops accompanying him, remained until July 20, 1898. During the stay in Charleston the troops were comfortably quartered in the sheds or warehouses near Charleston Harbor. A good deal of sickness developed among the troops at this point, which was due, doubtless, to the malarial infection of Chickamauga Park, the change of location having the effect of developing sickness from the latent miasmatic poisoning. This was aggravated through the apparent impossibility of keeping the men away from the numerous huckster stands. Quite an alarm went out from Charleston, and much was said about the sickness at that point being due to mismanagement, etc. This was but idle talk, and if there was an aggravation of sickness beyond natural causes it was due to the uncontrolled imprudence of the soldiers themselves.

The supplies in every department here were abundant and judiciously distributed and administered. The men were rationed with vegetables, fresh bread, and meat abundantly every day. The discipline of the troops was excellent. The weather was intensely hot, and in the practice marches some men suffered temporarily, but not lasting or serious injury.

Leaving Charleston, S. C., on July 20, 1898, in company with Major-General Wilson, aboard the United States transport *Obdam*, I proceeded with him to Porto Rico, landing at Port Ponce, Porto Rico, July 28, 1898. The trip to Porto Rico was a most successful one. The vessel was in fine condition. The subsistence was all that could have been asked. The commanding officer of the transport *Obdam*, Capt. Harlow R. Arey, and his associate officers, deserve to be specially commended for their efficiency on this trip.

PORTO RICO.

Being with the same command, the good effects of the discipline and drill administered the troops at Chickamauga Park was plainly and effectively demonstrated, now they were entered upon a more active field of duty, and contributed

largely to the effectiveness and success of the Porto Rican campaign. The army supplies were abundantly sufficient and of good quality. There was, of course, some unavoidable loss and damage of army stores consequent upon the long sea voyage, but not sufficient to create want or distress on the part of the troops.

Vegetables to the extent the island afforded were issued, and the fresh bread and meat supplied to the troops were liberal and abundant. Going to the island of Porto Rico at probably the most unfavorable (the rainy season) period of the year, there was, of course, considerable sickness among the troops. The dews were heavy, and the soldiers, being of necessity in camps, were subjected to all the vicissitudes of a strictly tropical climate.

So far as my inspection extended, the sickness incident to this campaign was due to local and natural causes, and by no means attributed to mismanagement or a lack of proper supplies or want of care on the part of the Government and its officials. The sickness was alike prevalent to both officers and men. It is more than likely that the want of proper police and sanitary conditions contributed somewhat to the sickness of the troops, but it must be reasonably and rationally remembered that in a tropical island, with all of its conditions to be contended with, it is an impossibility to obtain perfection in this line. As the full details of the campaign are embraced in the report of the commanding general, it is not necessary that I should allude to them in this report.

GENERAL OBSERVATIONS.

The island of Porto Rico is a rich and most productive country, and no doubt will prove a valuable acquisition to the United States. The fertility and productiveness of its soil is proven in the large and abundant yield of sugar, coffee, tobacco, and tropical fruit. The climate is pleasant and altogether endurable. With proper care and precaution there is no reason why it should not be a healthy habitation. It is most abundantly and advantageously watered, which will make the introduction of proper sanitation a matter of easy work. The natives, as a mass, are of a most inferior race, but entirely docile and submissive.

There is considerable intelligence and refinement to be found among the better or Spanish portion of the inhabitants, and these were apparently enthusiastically rejoiced at the coming of the United States troops. The improvements upon the island, especially in the towns and cities, are really greater than could have been anticipated and expected. With the introduction of American energy and enterprise, Porto Rico will, without doubt, become a valuable possession of the United States. Accompanying Major-General Wilson, who, in obedience to orders from the headquarters of the Army, dated Port Ponce, Porto Rico, August 26, 1898, we left Port Ponce September 8, 1898, and sailing for New York City landed there September 15, 1898, when and where my duties as inspector-general of the First Division, First Army Corps, ceased.

SUGGESTIONS AND REMARKS.

It may not be improper in me in this report to make mention of the high qualities and great efficiency of Maj. Gen. James H. Wilson as a commanding officer. Able, energetic, ever watchful, and altogether resourceful, he has few if any superiors as a valuable and successful commanding officer. It is altogether proper, as well as my duty, to here make a special mention of the following officers of General Wilson's command:

Maj. Eli D. Hoyle, as ordnance officer on General Wilson's staff, deserves special mention and commendation for his proficiency as an officer and his constant faithfulness to duty. What is said here of Major Hoyle should likewise be said of Maj. J. A. Varnedoe, chief commissary of subsistence; Maj. John McG. Woodbury, chief surgeon; Maj. L. A. Craig, adjutant-general; Capt. Augustus P.

Gardner, assistant adjutant-general; Capt. John C. Breckinridge, assistant quartermaster, and Capt. Osmun Latrobe, aid-de-camp.

By way of suggestion, I would beg to say that one of the troubles in handling so large an army in the field, and that which has doubtless given rise to so much unwise and unjust criticism, is the too strenuous adherence to the army or garrison regulations and rules in administering the duties of an army in the field. This, which is termed the "red-tapism" of the Army, often causes such delay as is detrimental to the service, and most infrequently brings hardships and temporary privation to the soldiery.

I would further suggest in this connection that the supply of subsistence for sale to enlisted men in the commissary departments is not sufficiently abundant or selected with that care and judgment that it should be.

One of the greatest sources of trouble with the army which has been serving in the Spanish-American war, and one that has caused the greatest fatality from sickness, has been the want of proper police and safe sanitation among the camping troops. This being true, I would most respectfully suggest that the proper authorities of the Army be charged with the duty of inventing and putting into practical use in the Army some convenient and transportable system of crematories, which shall be a part and parcel of every camping troop, thus doing away with the dangerous and sickness-producing sinks. What the Army needs is some safe and successful disposition of the garbage incident to every army camp.

Respectfully submitted.

H. H. CARLETON,
Major and Inspector-General.

WASHINGTON, D. C., *January 14, 1899*

TESTIMONY OF MAJ. FREDERICK A. SMITH.

Maj. FREDERICK A. SMITH then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by the recorder of the commission.

By Colonel DENBY:

Q. State your name and the position that you occupied in the Army.

A. Major and commissary of subsistence, captain of the Twelfth Infantry, and commissary of the Department of the Lakes.

Q. How long have you been in the Army?

A. Nearly twenty-six years.

Q. You were in the line?

A. Yes, sir.

Q. And not in the Commissary Department?

A. Only since the 12th of July. After leaving my post at Fort Leavenworth, Kans., I was at Chickamauga up to the 13th of May, and went from there to Tampa. On the 22d of May I was called to General Shafter's staff as adjutant, before the organization of the Fifth Corps, and went with him in a subordinate capacity when his regular adjutant came there for duty, about two or three weeks after that. I remained with him until I was appointed a major of volunteers on the 22d of July in Cuba.

Q. Then you served as commissary in Cuba?

A. During the latter part of July, from the 22d of July to the 1st of August.

Q. Did you serve any longer as commissary?

A. I was then ordered to report at Washington, and was sent from there to Chicago as chief commissary of that department.

Q. Then how long were you in Cuba?

A. From the time we arrived, in June, the 13th or 14th, until the 1st of August.

Q. What were your duties as commissary, or while acting as commissary, in Cuba?

A. I superintended the issuing of the first cargo of fresh beef that arrived, also a part of the second.

Q. What ship did the first cargo come on?

A. I have forgotten the name; I was trying to think.

Q. Do you know where it came from?

A. It was consigned from Swift & Co., and, I think, came from Tampa.

Q. How many pounds were in the shipment?

A. I don't know the number of pounds. The reason I do not know this was by reason of the sickness of the other officers, which forced me into this duty, and I superintended this issuing until recalled to Washington by telegram.

Q. That was refrigerated beef?

A. Yes, sir.

Q. What did you do with it?

A. Took it from the transports in lighters and unloaded it on the wharf under a shed, and issued it to the brigade and division commissaries.

Q. Did you inspect the meat?

A. I did.

Q. What was the character of it?

A. I considered it of most excellent quality—better than the meat I have usually seen at the frontier posts.

Q. Had you seen that same meat at frontier posts?

A. Not that same character of meat; no, sir. That was usually furnished by local contractors.

Q. Could you tell whether any chemicals were used in the preparation of this refrigerated meat?

A. I could not tell that, except that I never heard of a word intimating that any chemicals were used in the preservation of the meat until I read it in the papers recently.

Q. As result of General Miles's evidence?

A. Yes, sir. There was no word or thought of that there.

Q. From the appearance could you tell whether it was natural beef or not?

A. It seemed to be perfectly natural beef.

Q. Could you tell whether boric acid, salicylic acid, or nitrate of potash was in it?

A. I could not tell, except I ate it myself a great deal and enjoyed it very much.

Q. Were there any complaints of it?

A. Not one word.

Q. Do you know anything about the tinned beef?

A. Only by hearsay and my personal experience in eating it; I lived on it for some time.

Q. About how often; as a general thing or only occasionally?

A. Well, I lived on it for some weeks; just how long I could not say. It was the only supply we had on the ship after the fresh beef became exhausted and the ice ran out.

Q. What was the character of the meat; good and pure, or contrary?

A. I considered it good and nutritious.

Q. How was it in regard to being palatable?

A. It rather palled upon us after eating it constantly; but I considered it good beef under the conditions with which we were surrounded.

Q. How did you have it prepared?

A. We usually had it prepared by cooking it with condiments or mixed with some vegetables, like potatoes.

Q. Would you regard it as a proper article to be issued to the troops as an emergency ration when you can not get better?

A. I would; most certainly.

Q. On what ship did you come back from Cuba?

A. On the *Segurança*; the same ship I went down on with General Shafter, and by accident I came back on the same.

Q. Were there sick people aboard?

A. We brought a number of sick people with us to Tampa, and when we arrived at Egmont Key we met some other vessels with sick aboard, and finally gathered those sick from those ships and came to New York.

Q. Did you find out during the voyage how the sick were taken care of?

A. Yes, sir; from my own personal inspection and observation.

Q. How was that?

A. Every attention was given them possible under the circumstances. Dr. Vaughn had been assigned to that duty and had special instructions from the War Department to make them comfortable in every way.

Q. Were you acting as commissary on the ship?

A. No, sir.

Q. Then, when you arrived in the United States, had you anything more to do with the Commissary Department?

A. I reported in person to the Commissary-General, and was ordered to report at Chicago as chief commissary of that department.

Q. Had you anything to do with meat at Chicago?

A. No, sir; not directly.

Q. Is there anything else you would like to state?

A. Not at present.

By General WILSON:

Q. Did Captain Worden, of the Seventh Infantry, come back with you on the *Segurança*?

A. No, sir; he was not on our ship.

By Captain HOWELL:

Q. I would like to ask you if, while at Santiago or anywhere else, the men were made sick by eating this refrigerated beef or the canned meat?

A. No, sir; I never heard of such an intimation even. I never thought such a thing possible.

Q. You were in a position to know?

A. Yes, sir.

Q. If anything of that kind had happened you would have heard of it?

A. Yes, sir.

Q. You were with General Shafter's headquarters?

A. Yes, sir.

Q. And a great deal of that meat was eaten by the army?

A. Yes, sir.

Q. And you never heard of any instance?

A. No, sir.

Q. You never heard of any of the soldiers complaining?

A. No, sir; none complained to me nor did I hear of it by casual remark.

WASHINGTON, D. C., *January 16, 1899.***TESTIMONY OF FRANK E. VOGEL.**

Mr. FRANK E. VOGEL, being duly sworn, testified as follows:

By Colonel DENBY:

Q. State your name.

A. Frank E. Vogel.

Q. And residence.

A. Chicago.

Q. And occupation.

A. I am a member of the firm of Nelson Morris & Co.

Q. How long have you been in that firm?

A. Nineteen years.

Q. The firm has headquarters at Chicago?

A. At Chicago.

Q. What is the business; what are they engaged in?

A. In the business of dressed beef.

Q. What you call refrigerated beef?

A. Refrigerated beef.

Q. And have you been with the firm during nineteen years?

A. Nineteen years.

Q. In what capacities, Mr. Vogel?

A. General charge and management of it.

Q. Well, then, you know how this beef was prepared?

A. In every respect.

Q. Well, we have had it so often here that we have determined not to go into detail, so I will ask you general questions and very few of them. You know about how the beef is prepared by Armour & Co. and Swift & Co.?

A. Yes, sir.

Q. Is your process the same?

A. Similar.

Q. How about Government inspectors; have you any?

A. We have them.

Q. What do they do?

A. They inspect the intestines, the liver, and lights of the animal as soon as opened, and if found in a healthy condition they are passed upon, and if any are found otherwise they are ordered to the tank.

Q. Are they inspected on the hoof?

A. Yes, sir; first.

Q. By whom?

A. The Government inspectors.

Q. Have you anything to do with paying them?

A. No, sir?

Q. Afterwards the meat is cut up and tagged and refrigerated, as these gentlemen have described?

A. Exactly, sir.

Q. Do you ever use boric acid, salicylic acid, or nitrate of potash, or any chemical on the meat?

A. No, sir; nothing of the kind.

Q. Did you ever hear of such things being used in the business?

A. Not during my experience.

Q. What do you say as to the beef—is it good beef or bad beef?

A. Good beef.

Q. Where did you sell it?

A. All over the United States; we have the refrigerating houses all over the United States, and we are large shippers to England.

Q. How long before that?

A. Nineteen years.

Q. And during this time you have dealt with the beef as an article of commerce?

A. Yes, sir.

Q. You have sent it to England—have you sent it to the Continent?

A. No, sir; just to England.

Q. Tell us about the amount or quantity of beef you have exported or prepared annually.

A. That we exported?

Q. No, sir; altogether.

A. About 250,000,000 pounds.

Q. What is the value of that entire business?

A. Close to \$90,000,000.

Q. And in that immense amount of beef you tell us you have never had any complaints at all?

A. No, sir.

By Governor WOODBURY:

Q. Have you sold any beef to the Government during the war with Spain?

A. Yes, sir; and I have a letter right here, which I would like to submit right on that subject.

Colonel DENBY. Who is it from?

WITNESS. I will read it:

DECEMBER 2, 1898.

NELSON MORRIS & Co.,

Union Stock Yards, Chicago, Ill.

GENTLEMEN: Referring to inclosed letter of your agent, Mr. George Dougherty, relative to the quality of fresh beef furnished the Government at Camp George H. Thomas, Georgia, I desire to state that approximately 5,000,000 pounds of beef was furnished by Nelson Morris & Co. during the past six months, and the fresh beef so furnished was excellent in quality and sufficient in quantity at all times; and during my twenty-five years of service in the Regular Army I have never seen such magnificent beef issued for six consecutive months; and the prompt, efficient, and courteous manner in which Nelson Morris & Co. carried out every provision of the contract and met every requirement of the service in their line, including emergency shipments and rush orders, is worthy of the highest commendation.

You are at liberty to use this letter to refute any and all statements to the effect that the fresh beef furnished at Chickamauga Park by Nelson Morris & Co. was anything but first-class and entirely satisfactory in every respect.

Very respectfully,

J. M. ARRASMITH,

First Lieutenant, Second Infantry, Depot Commissary,

Acting Chief Commissary.

Then here is a letter of December 3, which is only a correction; it is just simply a correction.

General DODGE. I will read it.

DECEMBER 3, 1898.

MY DEAR MR. WILSON: Yesterday I wrote you a letter about the quality of beef furnished here, in which I stated that 5,000,000 pounds of beef had been furnished by Nelson Morris & Co. My stenographer made a mistake and wrote the amount 500,000 pounds. Please correct the figures in my letter to read 5,000,000.

Cordially, yours,

J. M. ARRASMITH.

Q. Did you furnish any other beef to the Government than at Chickamauga?

A. No, sir.

Q. What were the specifications of that beef?

A. My recollection is 600 to 700 pounds.

By General McCook:

Q. Are you engaged in the industry of canned beef?

A. Nelson Morris & Co. are not; the Fairbanks Canning Company are, of which I am vice-president.

Q. Have you sold any canned beef to the Government?

A. Yes, sir.

Q. How much, approximately?

A. I suppose we have sold them \$150,000 worth.

Q. What was this, canned corned beef or canned roast beef?

A. Both.

Q. What was the proportion between the two?

A. I should say 65 per cent roast and 35 corned beef.

Q. Do you know anything about the manufacture or putting up of this corned beef—its preparation?

A. Yes, sir.

Q. Are there any deleterious chemicals of any nature used in its preparation?

A. No chemicals of any kind.

Q. I mean the roast beef.

A. Well, either one I would answer in that same way.

Q. But salt is a chemical.

A. Salt we used in corned beef, but not in the roast beef.

Q. Where did you market your canned roast beef generally?

A. All over the world.

Q. Have you had any complaints or had any of it returned to you under any contracts that were made?

A. None at any time.

Q. Do you put the dates on your cans?

A. No, sir.

Q. How long will a perfectly sealed can of roast beef last?

A. Fifteen to twenty years; maybe a little longer.

Q. It is impossible for chemical change to take place if properly sealed?

A. Properly sealed.

Q. Have you ever had complaints of "swellers?"

A. None whatever.

Q. Did you ever hear of any? .

A. No, sir.

By Captain HOWELL:

Q. I want to ask the witness to explain the difference between canned roast beef and canned corned beef.

A. The difference between roast and corned beef? Well, roast beef is fresh meat put in the cans and processed, and the corned—

By Governor WOODBURY:

Q. Now, that word "processed." Is there any process that affects the inside of the cans?

A. I meant by "process" a certain degree of heat is applied outside after the can is sealed up. It is put into the retort under a certain pressure of heat.

Q. That is what you call "process?"

A. Yes, sir.

Q. That is the canned roast beef?

A. Yes, sir.

Q. Now, what is the difference in the way of making the canned roast beef and the corned beef?

A. The corned beef is a cured meat.

Q. Just describe how you prepare it.

A. It is cured with salt and afterwards put into a can, and then processed by a degree of heat. Of course the can is first sealed before the heat is put to the can.

Q. Now, is any of that beef made out of scraps?

A. No, sir.

Q. Is any of it made out of beef that has had the juices extracted to make extract of beef?

A. No, sir.

Q. In either process?

A. Neither one.

Q. Did you have any old stock on hand when the war commenced that you sold to the Government?

A. No, sir.

Q. Do you keep any old stock?

A. No, sir.

Q. Did any of the canning establishments, to your knowledge, keep on hand any old stock?

A. Not to my knowledge.

Q. How do they prepare this? Is it according to the demands of the trade?

A. According to the demand.

Q. What kind of beef did you make this canned roast beef out of?

A. It is made out of good beef. A little lighter than beef used for the table, but it is just as good.

By General DODGE:

Q. Is it just the same exactly?

A. Exactly the same beef; that is, the fore quarters of the bullocks are used, and other parts.

Q. What weight of cattle did you use for the canned as compared with the refrigerated?

A. Live weight?

Q. Yes, sir.

A. Well, it varies. Sometimes they are heavier and sometimes they are lighter; most of the time they are lighter.

Q. They are all inspected by the Government?

A. Yes, sir; all inspected when alive and after being killed.

Q. You say you never have had any complaint from the Government or from private parties in relation to this canned roast beef?

A. None whatever.

By Governor WOODBURY:

Q. When was the first intimation that you had that this refrigerated beef had been treated with chemicals so that it might be called embalmed beef?

A. When I read it in the newspapers.

Q. What year?

A. 1898; about six weeks ago I guess it was.

Q. Were you ever accused previous to that time of using any chemicals in the preparation of beef?

A. I do not know that we were accused at that time. I only read of it.

Q. Were you ever accused of using chemicals in refrigerated beef or roast beef?

A. No, sir; at no time.

By Captain HOWELL:

Q. The beef you sent to Chickamauga, I believe you said that was the only contract you had with the Government—that is, you supplied Camp Thomas?

A. Yes, sir.

Q. Is that the same kind of beef you sent to the various cities of the United States?

A. Fully as good.

Q. Same process used for refrigerating?

A. Yes, sir.

Q. And every pound was passed on by the Government inspectors twice?

A. Yes, sir.

Q. Alive and after being slaughtered?

A. Yes, sir.

Q. Well, how many of these packing houses do a business of selling large quantities of refrigerated beef?

A. I should think there was half a dozen.

Q. Do you know any process that any packer in the United States uses other than the usual process you spoke of?

A. Never heard of any.

Q. You don't know how it could be used?

A. I would not know of any advantage in its being used. I never tried it, but I could not see any advantage in its use.

Q. Your process takes the animal heat out of the beef as soon as it is killed?

A. Yes, sir.

Q. And it is kept cool by refrigeration until it is used?

A. Yes, sir.

By General DODGE:

Q. Did you furnish beef at any other place to the Government besides Camp Thomas?

A. I don't believe we have.

By Captain HOWELL:

Q. Do you object to that letter being made part of your testimony?

A. No, sir; I would like to have it.

By General McCook:

Q. Have you any suggestions to offer?

A. I do not know of one question that could be put to me that would give you any more information than what I have given.

WASHINGTON, D. C., *January 16, 1899.*

TESTIMONY OF CAPT. ROBERT J. C. IRVINE.

Capt. ROBERT J. C. IRVINE, being duly sworn, testified as follows:

By Dr. CONNER:

Q. Captain, please be kind enough to state your name, rank, and official position.

A. Capt. Robert J. C. Irvine, Eleventh Infantry—Eleventh United States Infantry.

Q. Upon what duty were you engaged during the war with Spain?

A. I was sent from this city about the 1st of May to muster in the Michigan troops. After that, in the early part of August, I went to Porto Rico.

Q. Do you remember the date of leaving?

A. Yes, sir; I was ordered to report to Gen. F. D. Grant at Newport News on the 9th of August. We went to Porto Rico on the *Alamo*.

Q. On what duty were you after you left the mustering duty in Michigan?

A. I was placed on special duty at General Miles's headquarters at Porto Rico as assistant adjutant-general.

Q. At the time you left Newport News do you know whether or not all the baggage and supplies of General Grant's column had been taken?

A. No, sir.

Q. Do you know in what condition it was—

A. The *Obdam* was alongside the wharf where we were loading the supplies.

Q. Do you know whether medical supplies were left at Newport News that were sent for these troops?

A. No, sir.

Q. The special object of the inquiry now is with reference to the condition of things on board the transport *Panama*. Were you on board her on her return from Porto Rico?

A. Yes, sir; I was executive officer.

Q. Tell us what kind of supplies were received by you and how they were cared for on board the ship.

A. I think it was on the 31st of August I received 6,000 rations, I think, for the use of the convalescents to be returned on the ship.

Q. Before you go further please state the character of the rations. What constituted the rations for the convalescents that you received?

A. It was the ordinary ration.

Q. The full ration of the healthy soldier?

A. Yes, sir. I had 6,000 rations. I drew twenty days' rations for 300 men—much more than was needed.

Q. Of course this ration you drew included beef?

A. Yes, sir; I drew fresh beef.

Q. Was that fresh beef the beef of Porto Rican cattle or refrigerated beef?

A. Some was native and some was refrigerated.

Q. Will you be kind enough to state the relative proportions?

A. I can hardly do so from memory; my recollection is I drew 500 pounds of native beef, and perhaps 1,200—over a thousand—of that refrigerated beef.

Q. From what source did you obtain the native beef?

A. The commissary.

Q. It had already been killed?

A. Yes, sir; killed that morning, I fancy, from its appearance.

Q. Was there any means on shore for preserving the dressed meat?

A. That I could not say.

Q. I am speaking of the Porto Rican beef.

A. I do not know; I got that direct from the storehouse.

Q. And it was taken as quickly as possible to the ship?

A. Yes, sir.

Q. Had you any means of preserving it on the ship?

A. We had an ice box, but at first we did not get sufficient ice. We had trouble about getting ice. There was an ice factory that made 2 tons a day, and the demand in the town was large, and we did not get it at first until General Wilson ordered that it be not sold to any citizens until we were supplied. The native beef was drawn on the 27th or 28th of August, and then we went down to the far end of the island, and that meat was consumed going down and returning before we started to the United States.

Q. Then you had none when you started for the United States?

A. No, sir.

Q. Then with what beef did you start?

A. Refrigerated beef.

Q. Entirely?

A. Yes, sir; and the canned roast beef.

Q. At the time of leaving Ponce are we to understand you had no native beef—no dressed beef of the native cattle?

A. No, sir; I think not.

Q. Entirely refrigerated beef.

A. Yes, sir; that is my recollection.

Q. How long before you sailed did you obtain this refrigerated beef?

A. I think it was the morning before; it was either the day before or that very morning. We sailed in the afternoon about 4 o'clock.

Q. Then it was in the neighborhood of either six hours or thirty hours?

A. Yes, sir.

Q. Then this beef you took on board at Ponce, and with which you furnished the men coming home, was entirely refrigerated beef?

A. Yes, sir; and with the canned roast beef.

Q. And this meat was either six or thirty hours on board before you sailed?

A. Yes, sir.

Q. Did you have at this time a sufficient quantity of ice to properly keep that beef?

A. Well, the morning I took out the beef I drew it from the commissary's storehouse. I don't know how long it had been in there, but it was hot in there.

Q. Were there no means of cooling that in the storehouse?

A. No, sir; but I think it had been brought from the ship sent before that. Then I took it out on one of the lighters, and it was intensely hot there, and it was exposed for an hour possibly.

Q. When delivered on board ship did you or did you not have ice enough to have preserved the beef in good condition at the time it was received on board the ship?

A. No, sir; I am certain there was not ice enough when I received it.

Q. Governor Woodbury wishes you to tell us exactly what the condition of that beef was when you received it on board ship.

A. The beef I received in the commissary's storehouse.

Q. But when it reached the ship in what condition was that beef?

A. I should say it was in fairly good condition. There was a peculiar odor, but it was not putrid, and it was used for three or four days on board.

Q. As you remember, that beef was in such condition when it was put on board ship that it could be properly issued to men?

A. Yes, sir; and it was so issued.

Q. Now, your ice supply was sufficient to last for how many days to keep this meat?

A. Well, I could not answer that exactly, because, as I say, we had trouble in getting ice at Ponce. Then they telegraphed over to Mayaguez to have 6 or 8 tons for us on the following day or the day after.

Q. Did you get it?

A. Yes, sir. I think it was 5 tons, but it was not until the next day.

Q. Would a ton and a half of ice have been sufficient to preserve your meat from the time you left Ponce until you got to Mayaguez?

A. I think so; for twenty-four hours.

Q. Was the amount of ice you received at this last point sufficient to keep the meat during a trip to the United States had such meat been in good condition when you started?

A. Yes, sir; I think it would.

Q. How soon after sailing was complaint made of the character of the meat?

A. I think it was somewhere about the 7th of September that there was a very marked odor coming from the ice box.

Q. You sailed from Mayaguez?

A. We sailed from Ponce on the 1st or 2d.

Q. But you went to Mayaguez?

A. Yes, sir.

Q. And you lay there a day?

A. No, sir; only a few hours.

Q. And you sailed from Mayaguez at what time?

A. In the afternoon I think it was.

Q. Of what date?

A. Of the 4th.

Q. Fourth of August?

A. No, sir; 4th of September; I think it was the 4th.

Q. Now, how soon was it after this 4th of September that it was reported to you or you found that the meat was spoiled?

A. I think it was on the 7th.

Q. That would be on the third day afterwards?

A. Yes, sir; and I asked for a board of survey immediately.

Q. The Governor [referring to Governor Woodbury] wants you to describe to us in some detail the ice box on board that ship.

GOVERNOR WOODBURY. Whether the beef was hung up and the air was cooled from another compartment; and if so, what the temperature of that room was.

WITNESS. The temperature was about 40 or 45; and the beef was not hung up, but right on the ice, and, perhaps, some cakes of ice over it.

Q. Were these quarters wrapped or as they were originally?

A. I think there were some little burlaps on them.

Q. At the time they were in the ice box resting on the ice had they any cover?

A. I do not think there was any cover then.

Q. On the 7th of September, finding the meat spoiled, you called for a board of survey?

A. Yes, sir.

Q. Was any complaint made to you before you recognized yourself that the beef was spoiling?

A. I think the day before something was said about it.

Q. By whom?

A. I don't recollect.

Q. Was there any medical officer on board?

A. Yes, sir.

Q. Who was he?

A. In charge was Dr. William H. Daly.

Q. Did Dr. Daly, in charge of the ship, make complaint to you as acting commissary about the meat not being good?

A. No, sir; but Dr. Boyd did.

Q. He was his assistant?

A. Yes, sir; and there was a Dr. Brewer there.

Q. Did you yourself see that beef after it was issued from the storehouse and before it was received on board the ship at Ponce?

A. Yes, sir; I personally received it.

Q. Is it or not a fact that the meat looked well?

A. It had the appearance of beef that had been in storage. It did not look badly.

Q. Had it any odor whatever?

A. Yes, sir; I can hardly describe the odor, but it was not putrid.

Governor WOODBURY. An odor of age?

WITNESS. Possibly that would describe it.

Q. Would you describe it in any way?

A. It was a different odor from beef you find in a butcher shop, and I said to the commissary-sergeant, "That beef is all right?" or words to that effect, and he said, "Yes, sir." I noticed that on the surface there was a little discoloration, and he said it was all right; it only had to be scraped.

Q. Do you know the odor of ammonia?

A. Yes, sir.

Q. Was it an ammoniacal odor?

A. No, sir.

Q. Do you know the odor of rotten beef?

A. Yes, sir.

Q. Was this the odor of rotten beef?

A. It was as though it had been in a closed-up place.

Q. Did you notice this odor on board ship?

A. No, sir.

Q. Did you have occasion to examine the ice box, so that if the meat had odor you would have noticed it?

A. Yes, sir; I saw it every day.

Q. Had the beef been in any considerable degree decomposed would you have been able to recognize the odor if the meat was lying in the open air?

A. Yes, sir.

Q. And you did not recognize such odor?

A. I did not.

Q. As I understand you, the second day after you put to sea complaint was made of the meat by this Dr. Boyd; is that so?

A. I think it was the second and third days; and the next day when we were inspecting the ship it had such a bad odor we decided to have a board of survey on it.

Q. Did you or did Dr. William H. Daly get this meat at Ponce?

A. I received it as commissary.

Q. Is it or not a fact that Dr. Daly, when detailed to take charge of the transport *Panama*, obtained 2,000 pounds of meat from the commissary at Ponce? Did you or did he obtain it, or did you obtain it under his orders?

A. Yes, sir.

Q. Then it is strictly correct to say he obtained the 2,000 pounds of beef at Ponce?

A. Yes, sir; as commanding officer.

Q. Now, did that odor resemble, as you noticed it, the odor of a dead human body? Do you know what such odor is when a body has been injected with chemicals for anatomical purposes?

A. No, sir.

Q. Then you are not in position to say whether it had that odor?

A. No, sir.

Q. Have you any particular knowledge of chemicals?

A. No, sir.

Q. Do you know what boric acid is?

A. No, sir.

Q. Dr. Daly says, "I was obliged, owing to its condition and the just complaints of the sick about it, and the disgustingly sickening odor it emitted when being cooked, and its mawkish flat taste when served, and the safety of the patients—250 convalescent soldiers on board—to organize a board of survey, condemn and

throw 1,500 pounds of beef overboard." Now, was this meat when served to the sick in such condition that, from its disgustingly sickening odor and its mawkish flat taste, it could not be taken with any satisfaction by the sick?

A. Well, the meat was used for one or two days there.

Q. After it was spoiled?

A. No; not after it was spoiled, but before this.

Q. Was there a pound of this meat used after it was discovered that the meat was spoiled?

A. I think not.

Q. Or after it was spoiled?

A. As soon as the complaint was made I threw it overboard. In fact, the meat was thrown overboard before the board of survey met.

Q. Had you any beef after that to supply to those men?

A. Only the canned meat and the bacon.

Q. How many days out were you from that point of landing when the meat was thrown overboard?

A. We arrived at Fortress Monroe on the 10th, and I think it was the third.

Q. For three days, then, your men were suffering?

A. Yes, sir; the men's appetites were capricious, recovering from fever.

Q. Did you derive from any source the proper food stuffs for sick and convalescents?

A. I did not know of the medical stores and supplies.

Q. Any malted milk?

A. Yes, sir.

Q. And rice?

A. Yes, sir; we had rice.

Q. And cocoa?

A. We had cocoa also.

Q. Beef extracts of one sort and another?

A. Yes, sir.

Q. And jellies?

A. Yes, sir; and all sorts of soups.

Q. You had that in sufficient amount for the whole number of men on board?

A. Yes, sir; and every afternoon I made half a pint of claret punch for every man on board—made of lime juice, claret, and a little whisky.

Q. So far as you know, though they had no fresh beef, they did not suffer materially for want of proper food?

A. No, sir; the men improved right along.

Q. Did you observe the meat at all at other points that you have mentioned?

A. No, sir.

Q. You are not prepared to testify as to the character of fresh beef anywhere else?

A. No, sir.

By Governor WOODBURY:

Q. Captain, are you familiar enough with the preservation of beef, or methods of preservation of beef, to know whether or not when fresh beef is put upon ice—either on the ice or between two cakes of ice—that it will be preserved or not?

A. You mean if placed between two cakes of ice?

Q. Or on the ice.

A. It would be better to place it below the ice.

Q. Do you understand that when fresh beef contacts with ice, whether that is a good place to preserve it, or whether it should be hung in the air and the air should be cool and dry?

A. That would be the better way.

Q. Have you had enough experience to know whether fresh beef put on ice would be likely to be preserved?

A. No, sir.

Q. Now, please state whether or not Major Daly, or any other person, or surgeon, on board that ship *Panama*, stated that they thought this beef had been embalmed.

A. I never heard the expression used, sir, on board the ship.

Q. Did Major Daly or any other person on board that ship intimate to you that that beef had been preserved in any manner by the use of any chemicals?

A. I never heard it mentioned while on board ship.

Q. Was there anything about that beef, as judged by its smell or by the length of time that it kept, that led you to believe that it was any other than the ordinary fresh beef that was of some age and spoiled on account of the imperfect methods you had of preserving it on board ship?

A. Well, I think possibly the meat underwent some change when it was taken from the refrigerator ship to the shore.

Q. That is age. The question is, whether there was anything about that beef that led you to think it was other than beef that had grown old somewhat, and it had spoiled on account of the imperfect means you had of preserving it?

A. I thought afterwards, when the meat was thrown over, that it had undergone some change before it was on board or after it was on board and before we got the ice. I considered it had been good beef when it was on the *Manitoba*. I had some of it myself on the ship.

Q. You don't get my idea yet. I want to know if there was anything about that beef which was different from any beef treated as that was, considering its age and the circumstances under which it had been placed; that is, whether you thought it was beef of any other character than other fresh beef.

A. No, sir; I did not.

By General DODGE:

Q. Did you know it was taken from the *Manitoba*?

A. I do not know it, but that was my impression. I heard them say in the harbor that this was the vessel with the refrigerated beef on board.

Q. Why was not the beef delivered right to you from the refrigerator ship?

A. I do not know. I was directed to go on shore to Colonel Smith, the commissary there, and he said, "We have some meat sent right ashore from that vessel," and I think I told Major Daly, and he told me to get some. I drew 500 pounds at first, and then as much more again.

Q. Did you use it on the *Panama* when she was going over?

A. Yes, sir.

Q. In what quantity?

A. I can not tell you; but every morning the man who was commissary-sergeant came to me and I went down into the hold and issued the rations.

Q. What was the quality of the roast beef?

A. I don't know. As I said, their appetites were curious. I thought it was palatable if it was mixed with tomatoes and potatoes in a stew.

Q. Was there a stew made of it?

A. Yes, sir; that is the proper way; but the men did not care much for meat; they preferred rice and hominy that I had there for them.

Q. You had plenty of those things?

A. Yes, sir; abundance.

By Governor WOODBURY:

Q. When did you first hear of the possibility of beef being embalmed or preserved by chemicals?

A. I think the first was the reports of the proceedings of this commission in the public papers.

Q. How long were you on his staff?

A. I was not on his staff. I was on temporary duty at his headquarters.

Q. How long?

A. Three or four weeks.

Q. Were you there when the *Massachusetts* arrived with beef for his headquarters?

A. I don't recall the *Massachusetts*.

By General McCook:

Q. While on board the *Panama* did any medical officers there or any other person make any chemical analysis of this beef?

A. Not to my knowledge, sir. I never heard of it.

Q. What was the finding of this board of survey; what was their conclusion? You say the meat was destroyed before the board met?

A. Yes, sir. That was because the beef was so bad in its odor before the board met we had to throw it overboard, as it was right next to where 150 men slept. I have a copy of the proceedings of the board.

By General DODGE:

Q. Where is the copy? Let us have it.

[Witness produces paper.]

By Captain HOWELL:

Q. What ground did they give for condemning that beef?

A. That it was spoiled.

Q. There was no testimony submitted to them that injurious chemicals were in it?

A. No, sir; I do not think so.

Q. There is nothing of the kind in their report?

A. No, sir; I am sure there is not. I will show you the proceedings.

Q. What other duties connected with the Commissary Department did you perform during the war other than this trip?

A. None, sir.

Q. Have you been brought in contact with that department at any time?

A. Yes, sir; at several posts where I have been commissary.

Q. But not other than this during the war?

A. No, sir; I was mustering in the Michigan troops and then went to Porto Rico.

By General DODGE:

Q. How were they fed—these Michigan men?

A. By the State; and then the accounts were adjusted between the State and the General Government afterwards—after they were mustered in—and then they drew supplies from an officer with me who was acting commissary.

Q. What kind of beef did you furnish them?

A. Beef furnished under a contract with a butcher in the neighborhood.

Q. Was it refrigerated beef?

A. No, sir; it was not. I am sure it was not. I will read the proceedings and the order.

Proceedings of a board of survey convened on board the U. S. S. *Panama*, pursuant to the following order:

ORDERS, 2.]

U. S. S. PANAMA, *September 2, 1898.*

A board of survey will convene on this ship to-day at 1 p. m., or as soon thereafter as practicable, to examine and report upon the condition of beef the property of the United States, and for which Capt. R. J. C. Irvine, Eleventh United States Infantry, acting commissary of subsistence, is accountable.

Detail for the board: Maj. Frank Boyd, surgeon, U. S. Volunteers; Capt. W. P. Williams, acting quartermaster, U. S. Volunteers; C. Brewer, acting assistant surgeon.

By order of Major Daly, chief surgeon, U. S. Volunteers:

R. J. C. IRVINE,

Captain, Eleventh United States Infantry, Adjutant.

ON BOARD THE U. S. S. PANAMA,

September 8, 1898.

The board met pursuant to the foregoing order at 9 a. m.

Present: All the members.

The board then carefully inspected the beef to be acted upon, and for which Capt. R. J. C. Irvine, Eleventh United States Infantry, is responsible, and found 963 pounds rotten and unfit for use. The board also found that all due caution had been taken by Captain Irvine and those in his employ for proper care of the beef, and recommend that he be relieved from the responsibility therefor; the opinion of the board being that the beef was not in prime condition when received in the hurry of leaving Ponce.

The board recommends that the beef be submitted for the action of an inspector.

There being no further business, the board adjourned sine die.

FRANK BOYD,

Major and Surgeon, U. S. Volunteers, President.

W. P. WILLIAMS,

Captain, Acting Quartermaster, U. S. Volunteers, Member.

C. BREWER,

Acting Assistant Surgeon, U. S. Army, Recorder.

The foregoing proceedings are approved, and I directed that this tainted meat be at once thrown overboard, as the stench from it pervaded the adjoining part of the ship, where 150 convalescents slept.

W. H. DALY,

Major and Chief Surgeon, U. S. Volunteers, Commander of Panama.

By Captain HOWELL:

Q. That report says the beef was not in condition when received?

A. Not in prime condition, it says.

By General McCook:

Q. Did that board take testimony—swear witnesses?

A. That I do not know, sir. I was not called before it. I told them all that I knew about it, but I don't recollect being called before it.

Q. You were not present at the meeting of the board?

A. No, sir.

By Captain HOWELL:

Q. They exonerated you from any responsibility. There was no refrigerating apparatus on board and you did all you could to get ice, and you failed to get it?

A. Yes, sir.

Q. And this beef was in the rotten condition that the board pronounced it simply because of the lack of apparatus there to preserve it?

A. Well, it might have been that the beef had undergone some change before it was taken on board, between the time it was taken from the refrigerating ship until I got it.

Q. There was nothing in the quality of the beef but in the conditions surrounding it that made it taint?

A. Yes, sir.

By Colonel DENBY:

Q. Do you still adhere to the opinion that that beef was good when you got it, despite the report of the board of survey?

A. Yes, sir; I think it was fit for use when I got it.

Q. Then what, in your opinion, was the cause of its decay?

A. That may have arisen from the action of the heat on it, which had not thoroughly developed until after it came on board, and possibly from not being placed in the right position in the ice house, and likewise the scarcity of ice.

By Dr. CONNER:

Q. When you spoke of this being in condition for use, do you mean for immediate use or for use after some days had passed?

A. I mean right away.

Q. At the time you took it out of the storehouse you thought it good and proper for use?

A. Yes, sir; we ate some in the wardroom.

Q. Were you made sick by it?

A. No, sir.

Q. Was your stomach turned by it?

A. It was not as good as I would get in a first-class restaurant possibly.

Q. Wasn't it as tender as such beef?

A. It did not have that nice, fresh flavor such beef would have.

By General McCook:

Q. That decayed from ordinary causes—chemicals had nothing to do with it?

A. I never heard of it.

Q. Chemicals would have tended to preserve it—that would have been the object of the chemicals?

A. I presume so.

Receipt for subsistence stores transferred this 3d day of September, 1898, by Capt. Frederic H. Pomroy, commissary of subsistence, U. S. Volunteers, depot commissary at Ponce, P. R., to Capt. R. J. C. Irvine, Eleventh United States Infantry.

	Pounds.	Price.
Fresh beef.....	1,250	12½ cents.

Received at Ponce, P. R., this 3d day of September, 1898, the above-enumerated articles.

R. J. C. IRVINE,

Captain, Eleventh Infantry, Commissary.

(Signed in duplicate.)

Receipt for subsistence stores transferred this 31st day of August, 1898, by Capt. Frederic H. Pomroy, commissary of subsistence, U. S. Volunteers, depot commissary at Ponce, P. R., to Capt. R. J. C. Irvine, Eleventh United States Infantry.

	Pounds
Fresh beef.....	509

Received at Ponce, P. R., this 31st day of August, 1898, the above-enumerated articles.

R. J. C. IRVINE,
Captain, Eleventh Infantry, Commissary.

(Signed in duplicate.)

[Cable message. The Western Union Telegraph Company.]

JANUARY 2, 1899.

COMMISSARY-GENERAL, *Washington:*

Beef invoiced Captain Irvine September third came from Manitoba; beef invoiced him August thirty-first was native beef.

POMROY, *Commissary.*

WASHINGTON, D. C., *January 16, 1899.*

TESTIMONY OF BRIG. GEN. CHARLES FREDERICK HUMPHREY.

Brig. Gen. CHARLES FREDERICK HUMPHREY, being duly sworn, testified as follows:

By General WILSON:

Q. Will you please give your full name, your rank in the regular and volunteer service, and the duties under your immediate charge?

A. Charles Frederick Humphrey, lieutenant-colonel and deputy quartermaster-general, U. S. A., and brigadier-general of volunteers.

Q. State a short record of where you were on duty from the time the war was declared.

A. By virtue of Special Orders, No. 90, Headquarters of the Army, Adjutant-General's Office, Washington, D. C., April 18, 1898, I was assigned to duty on the staff of the Major-General Commanding the Army, as chief quartermaster, and performed duties in this city until April 23, 1898, when the General ordered me to proceed to Chickamauga, Tampa, Mobile, New Orleans, and St. Louis to carry out special instructions communicated to me in connection with supplies, etc., for the troops at the respective places, and upon completion of the duties to return to the Headquarters of the Army. I arrived at Tampa the same day as General Shafter, and the next day he asked me if I would take hold of the quartermaster's department at that point, matters pertaining to this branch of the service not being satisfactory, as he thought. I replied that I would willingly do so, without regard to rank, but I did not see how I could perform the duties, as I was there on other business. However, I took up this duty at once, and my first work was to equalize the wagon transportation. Regiments and batteries from eastern posts had very little or no transportation, while those from posts west of the Missouri River were fairly well supplied with it. It was necessary to equalize the transportation at once, for the purpose of providing all the troops with supplies at that time, and, as fast as animals, harness, and wagons arrived, add to each regiment's transportation until it was placed on a war footing; and also to organize, man, and equip pack trains for war service. Later that day, by virtue of General Orders, No. 1, Headquarters United States Forces, Tampa, Fla., May 2, 1898, I was assigned to duty as chief quartermaster Fifth Corps, and continued to perform that duty until May 10, when I assumed the duties of depot quartermaster, which I performed until June 1, when I gave my whole attention to the ocean transportation up to the date of the sailing of the expedition; and, having been authorized by the Major-General Commanding the Army to accompany the expedition, I was, by virtue of General Orders, No. 17,

Headquarters Fifth Army Corps, on board the S. S. *Segurança*, June 14, 1898, assigned to duty as chief quartermaster of the expedition. Performed this duty until July 23, when I asked to be relieved, and was relieved of all duties other than those pertaining to ocean transportation. Continued to perform that duty until August 24, when, by virtue of Special Orders, No. 76, I was relieved from duty with the expedition, and directed to report to the Commanding General of the Army, in Porto Rico, for duty; but not being able to leave Santiago until August 26 I continued on duty until that date, when I was directed by the honorable the Secretary of War to proceed to Montauk Point, and from there to Washington, D. C., and report to the Major-General Commanding the Army for further orders. My duties as chief quartermaster of the Fifth Corps were of a general character, incident to the equipping of troops for war service—so far as my department was concerned—and the fitting up of ocean transportation, with all of its accessories, for the purpose of transporting them to and landing them on the Island of Cuba. This meant the supplying of organizations with wagon and pack-animal transportation, supplying them with clothing, tentage, and all the other necessary stores and supplies required from the Quartermaster's Department by an army being organized and equipped for field service incident to war. I necessarily received all the supplies we had from depots and stations in the country or by purchase at Tampa and other cities, and was in constant communication with the Quartermaster-General and the Commanding General of the Army with reference to ocean transportation, etc., for the expedition. There were at Port Tampa three or four transports when I arrived, and soon they were coming into the harbor almost daily. When a transport came in she was at once coaled, watered, and the fires drawn; bunks for men or stalls for animals were then erected; ship cleaned, towed into the stream and anchored, ready for future use.

Q. Under whose immediate orders were you serving then?

A. General Shafter's.

Q. Until General Miles arrived?

A. Yes, sir; then under the orders of both. I obeyed orders from both of them.

Q. Now, in that answer you have saved me asking several questions. How do you account for the railroad congestion and how long did it take you to unravel the tangle?

A. I don't think it was unraveled at that time. There was great trouble in getting supplies to Tampa and greater trouble to Port Tampa, as there was only a single track. The railroads had not the facilities to handle the amount of supplies, etc., sent there. But I did not personally take charge of that; I gave my attention, in the depot, to equipping the troops, and turned railroad matters over to Captain Bellinger; I left him in charge.

Q. But your answer is that the railroad congestion was there. Was there any friction between the Plant system and the Florida Central and Peninsular Railroad?

A. Yes, sir.

Q. Resulting in this congestion of the traffic of the United States?

A. Yes, sir.

Q. If so, to what extent did it delay the transportation?

A. It delayed it in this way: They would greatly delay or not accept cars from the Florida Central and Peninsular.

Q. Simply would not do it?

A. Yes, sir. They had a connecting track laid in one of the streets of the city, but they failed to use it to any considerable extent until compelled to do so. There was a large storehouse to be built, and by some manipulation it was placed on the side of their track, but I had it taken down and put up between the two roads, where they nearly come together. The two roads run within a short distance of each other at one point near the city and then branch off to their stations,

about three-quarters of a mile apart. The Plant system was required to construct, or permit of the construction, of a connecting track at or near the first-named point.

Q. Who built that; the United States or the railroad companies?

A. I would say that the railroad companies built the connection—not knowing it. They have since torn it up.

Q. Who do you mean by “they?”

A. The two roads in conjunction.

Q. Now you tell us you assumed charge of this water transportation. I want to ask a few questions, and then after I get through you can make a statement if you wish. Were all vessels intended for transportation of troops to Santiago properly fitted out with sleeping and other accommodations, and were they carefully inspected under your direction before the troops went on board?

A. Yes, sir; I think under the circumstances they were as well fitted out as was possible. I do not think they could be better fitted out in the future under the same circumstances.

Q. What arrangements were made in advance for loading troops on transports? Were schedules prepared showing the troops assigned to each ship a day or two in advance, and were the regimental and battalion commanders notified sufficiently in advance to save friction?

A. I can not say as to that. I knew by telephone or telegraph when the regiments or batteries would start and the number of men in the organization. I will say that my information was that Chaffee’s brigade would break camp first, and therefore be the first to embark.

Q. Did you say Shafter’s brigade?

A. Chaffee’s. I reported to General Shafter that I would be ready to embark troops at noon, but Chaffee’s brigade did not arrive then, nor did it arrive, owing to the congested condition of the railroad, until half past 2 Tuesday morning.

By Governor WOODBURY:

Q. What day of the month was that?

A. I have a memorandum made at the time. [Consults memorandum.] Monday was the 6th. It was the intention to commence loading at noon Monday, but as a matter of fact it was half past 2 Tuesday morning.

By General WILSON:

Q. The 7th?

A. Yes, sir; the 7th.

Q. Did you assign, or were troops assigned under your direction or by anyone, in advance to the different vessels?

A. No, sir.

Q. Then, when these brigades came to you, you assigned them for the first time?

A. Yes, sir; and it was necessary to do so, General. When the loading of the troops commenced, the transports *San Marcos*, *Iroquois*, *Cherokee*, *D. H. Miller*, *Concho*, *Orizaba*, *Comal*, *Berkshire*, *Allegheny*, *Seneca*, and the *Florida* were in the canal alongside of the pier; the *Segurança* was at the head of the pier, and the *Gussie* and *Whitney* were in the slip.

By Captain HOWELL:

Q. You mean those vessels were in the slip, not in the canal?

A. No, sir; it is a canal possibly half a mile long.

Q. At Port Tampa?

A. Yes, sir; there is a pier running out into the bay—

Q. That is the slip?

A. No, sir; the slip is on the south side and near head of pier. [Continuing former answer concerning transports.] In the stream were the *Vigilancia*, *Miami*, *Saratoga*, *City of Washington*, *Santiago*, *Alamo*, *Yucatan*, *Olivette*, *Leona*, and *Rio Grande*. This is my list, made at the time, for that day. We had eleven transports in the canal, and as soon as possible on being loaded with troops and when necessary they were warped to the other side and out of the canal, stern first, by tugs and anchored in the stream. All the transports were in the stream by the night of the 8th except the *Orizaba*, which was receiving siege artillery on board.

By General WILSON:

Q. My impression is—if I am mistaken I want the gentlemen of the commission to correct me—but my impression is that your assistant, Captain McKay, said that in advance, by your direction—thirty-four to forty-eight hours in advance—lists had been prepared indicating the ships upon which the troops were to go. Gentlemen of the commission, am I correct?

General DODGE. He submitted a list showing where all the troops were to go.

The WITNESS. The organizations or the number of men?

General DODGE. What ships would carry the men.

The WITNESS. It all went by the board, General, at once, if such list had been prepared, because here is a rough memorandum which I made at the time. First the *Iroquois*, second the *Cherokee*, and third the *D. H. Miller* were loaded with Chaffee's brigade in the order named. Then it shows the *Vigilancia* was intended for the First District of Columbia Volunteers, the *Miami* for the Second New Jersey Volunteers, and the *Saratoga* for the Fifth Maryland Volunteers. These regiments did not report. The three vessels last mentioned were lying in the stream and were to receive the troops from light-draft steamers bringing them from Tampa. I am sure I never received such an order nor could McKay have. The *Iroquois* was at the head of the canal, the *Cherokee* alongside of her, and the *D. H. Miller* behind the *Iroquois*. They were to take Chaffee's brigade, but they were somewhat crowded, and a few of the troops were put on the *Manteo* and *Comal*.

Q. Then, as I understand you, you had not prepared in advance a list, so far as you recollect, indicating the exact regiments to go on each particular ship, but you had the ships in the canal, and as the troops moved forward they were loaded, commencing with the outer and going along the line?

A. No, sir; began with the head of the line. I received no order and made out no list such as you refer to. I received telegrams telling when Chaffee's brigade and other troops would leave their camps. I have telegrams in which General Shafter asks how the embarkation was progressing and requests me to keep the loading going on all night. It was the night of the 7th; he desired the loading to continue during the night.

Governor WOODBURY. I think, in addition to Captain McKay, that General Shafter testified to that same thing.

General WILSON. I did not prepare myself for that. I can not recall General Shafter's testimony, and I did not anticipate any difference of opinion.

Q. How were these vessels loaded with supplies? Were certain portions of each ship assigned to each department, and was a complete schedule of the articles on board given to the captain of each vessel, showing just where the articles were loaded on each ship? That question is based on the fact that statements have been made before us that property was loaded in a helter-skelter way; that commissary and medical and quartermaster's stores were mixed. Were certain portions of each ship assigned to each department—the Commissary Department, the Medical Department, the Quartermaster's Department, and so on—and was a

complete schedule of all the articles on board of each vessel given to the captain of each vessel, showing just where the articles were loaded on each ship?

A. They were loaded with order and by themselves—quartermaster's, ordnance, and commissary stores. There were few medical stores—that is, in bulk at least—when compared with the stores of the other departments, but they were loaded by themselves at Port Tampa, and what changes were made, if any, while en route to Cuba, I do not know. I have a correct tabulated report of about everything connected with the expedition and its ocean transportation, which was submitted by me to General Shafter, as it shows, on the 19th of June. Captain Quay had men on the wharf checking the stores, etc., put on board the vessels, and besides that, the Commissary and Ordnance Departments were looking after their own stores, and I only knew of Colonel Weston having a list by my offering him one of mine, showing the commissary stores, when he told me he had one. I had prepared a number for that purpose—to give away.

Q. Will it be agreeable to give that list to me as a part of your testimony?

A. Yes, sir.

Q. Now, having told us you inspected the transportation of these vessels, and you thought everything had been done to make them comfortable under the circumstances; having told us how these troops were placed on board and how these stores were placed on board, we will now, if agreeable to you, move to Santiago. Will you tell us what arrangements were made, before leaving Tampa, for disembarking troops or unloading supplies at Daiquiri or its vicinity after arriving in Cuba?

A. We started out with a light-draft vessel, the *Manteo*, 8 feet draft; steam lighter *Laura*, 5 feet draft; a tug called the *Captain Sam*; two decked-over lighters, and the steamer *Cumberland*, 8 feet draft. All excepting the steam tug were good vessels of their kind; the lighters were good. The first night out the tugboat deserted and one of the lighters—a decked-over lighter—was lost, so that when we landed we had the *Laura*, the light-draft steamers *Manteo* and *Cumberland*, one decked-over lighter, and, of course, a large number of ships' boats.

Q. A few direct questions I will ask, to which, if you can not now answer, you will perhaps be able to give the data afterwards. What number of wagons were shipped from Tampa to Santiago?

A. One hundred and fourteen 6-mule wagons.

Q. How many ambulances?

A. There were four—now, this is to the best of my knowledge—there were four on the *Iroquois*, and they were “knocked down,” and three came with General Bates's troops from Mobile. There was one each on the *Matteawan*, *Stillwater*, and *Aransas*. They were set up and shipped on the upper deck.

Q. Seven ambulances?

A. Yes, sir; that is all I know of.

Q. That corresponds to General Shafter's testimony.

A. I am sure of the three, as I personally unloaded them.

Q. Were the draft mules—six for the wagons and two each for the ambulances—shipped?

A. Yes, sir; for each wagon.

Q. How many for the ambulances?

A. It was intended, General, to use either draft or pack mules in the ambulances if required. There was ambulance harness, and the mules worked in any vehicle.

Q. Then you only sent six for each wagon?

A. Yes, sir.

Q. Will you recall how many pack mules there were?

A. If you will allow me to look at my report.

Q. Certainly.

A. [After perusal of memorandum.] There were 390 pack and 946 draft mules—1,336 in all.

Q. How many horses?

A. Government horses, 578; private, 381.

Q. Do you know, or would you naturally know, how many litters were sent?

A. I do not think so.

Q. I did not assume you would.

A. They should go aboard with the troops. I would look upon them as a part of the regimental baggage—hospital property pertaining to the regiment, battalion, or battery. I saw litters taken on board at Port Tampa.

Q. Why were no more ambulances taken?

A. The vessels were full. The *Iroquois* and *Cherokee* were to take the wagon transportation.

Q. Would your reply be “lack of transportation?”

A. I would not want to say that. We might have rearranged things. Several of the transports were loaded with coal, to meet possible emergencies en route or while on the coast of Cuba or Porto Rico. Some of that might have come out, though I do not think it would have been the right thing to do at that time.

Q. The reason was, the vessels were full?

A. Yes, sir.

Q. Can you tell me when the wagons were first landed in the vicinity of Santiago?

A. Well, let me see. Yes; I should say we commenced taking the wagons off the transports on the 25th. I judge from the order—

Q. Twenty-fifth of what?

A. Twenty-fifth of June. The order was to unload Lawton's and Bates's infantry first; then Wheeler's cavalry; next, Kent's infantry; then Second United States Cavalry, mounted; last, the light batteries.

Q. And the ambulances about the same time?

A. Yes, sir; I got three off—the three I mentioned—on the 25th. I can not say as to when the others were unloaded more than that they were on the *Iroquois*, and it was the first or one of the first vessels unloaded. As I said, this vessel carried a part of Chaffee's brigade, and Lawton's and Chaffee's headquarters were on it and were the first to land.

Q. The mules—draft and pack mules—were unloaded about the same time as the wagons, or previously?

A. I was in charge of the unloading of the troops, but I saw that was comparatively easy, so I personally took up the work of unloading the animals. I went on the *Gussie* then, and later to the other vessels carrying animals, and worked through the days, and as late into the nights as was possible, until all had been landed.

Q. What day?

A. The 22d. My order was to get off the pack mules and their equipment; then the draft mules; next, wagons and harness; then the artillery horses, guns, etc. We landed the pack mules first, and then the draft mules followed.

Q. Could you possibly recollect how many ambulances were landed by June 30, although I will say that I could hardly expect any human being to remember those details?

A. All I know of is seven, and I am not sure of that; I know three were.

Q. Three surely, then?

A. Yes, sir.

Q. How about the wagons; can you remember that? I will say to you that my reason for asking is, that Major-General Chaffee testifies that on July 1, ten days after the landing, no wagons or ambulances had been landed.

A. He is mistaken. Major Jacobs was setting them up, and he can give you definite information about that. I should say the 25th we commenced.

Q. Can you recollect at what date all the wagons and ambulances and mules were loaded and ready for duty at the front?

A. All the wagons were never set up.

Q. Were they all landed?

A. Yes, sir. We had a large amount, 114 six-mule wagons from Tampa and 84 six and four mule teams from Mobile with General Bates's independent brigade; but that all shows in my report that it was transportation for the expedition.

Q. Eighty-four came with Bates?

A. Yes, sir.

Q. Making in all 198 instead of 114?

A. Well, the expedition was—those 84, I think, were all four-mule wagons; it is in my report. They came with General Bates, and also three ambulances.

Q. Can you recall whether any litters were landed before the battle of Guasimas, which was the first fight?

A. There should have been, because they belong to regiments as well as hospitals.

Q. General Chaffee said only litters could have been used, but even those were not on hand, as owing to neglect or oversight none had been landed.

A. Well, the litters go with the hospital corps. I think they must have been landed; if not landed, regimental commanders and surgeons were at fault.

Q. General, I have now got from you the information I desired about the landing of the wagons, ambulances, and the mules and litters. I want to ask one or two more questions, and then I will let you state what you desire and then turn you over to the other gentlemen. Was the *Seneca* inspected at Santiago before leaving on July 14 to bring the sick and wounded to the north—the first vessel?

A. The *Iroquois* was the first. I remember when the *Seneca* left Siboney—she left Siboney, not Santiago. I won't say she was inspected, but I selected her for the reason that I had sent her to Jamaica on June 30, to bring over a lot of stevedores if they could be properly gotten. The captain failed in that, but was given some water and provisions and ordered to depart. I was ordered about the 10th of the month to go to Guantanamo Bay, to ascertain if it was a good place for a large camp, I took the *Seneca*; she had water and provisions, which she got in Jamaica, and I considered her in good shape. Colonel Van Horn, Eighth Infantry, was on board of her.

Q. Miss Jennings, within the past few days, who, by the authority of the Medical Department, came north on the *Seneca* as nurse, stated that the captain of the ship stated that his vessel was dirty, was unfit for hospital purposes, and had never, in any way, been inspected.

A. I do not know what Captain Decker may have told Miss Jennings. I know I was between the decks and in the staterooms and saloon of the *Seneca* on the 10th and 11th of July. She was a clean ship. Decker undoubtedly wanted to come north without the hospital sick. If he had no one on board except by proper authority, and the vessel was crowded with passengers, he had cause to find fault. I neither had the time, nor was it my duty, to inspect a ship after it had been turned over to the Medical Department; it might as well be considered the duty of my department to inspect for cleanliness a post or field hospital. A letter from General Shafter, of June 23, informed me that the *Olivette* had been designated as a hospital ship, and would be under the orders of the chief surgeon as far as the reception of sick was concerned.

Q. Was the *Concho* inspected under similar circumstances?

A. I can not say I inspected her, but I was on board the morning she left Santiago for Siboney, and she was a clean, fine ship; I considered her a clean, fine ship, and her captain one of the best captains in the fleet.

Q. Can you recollect how many passes you gave to foreign attachés and people, other than sick and wounded, to go north on those vessels?

A. I did not give but a few passes for the *Concho*; there was no particular rush to get away then, there being but few civilians with us at that time. I gave a good many for the *Seneca*; gave passes to all newspaper men there, by permission of the War Department, who desired to go north, and probably to other men connected with the press; also to attachés and discharged employees. Passes were given because yellow fever was raging at Siboney, and I felt the quicker the army could rid itself of them the better it would be for all concerned. I had given passes for the *Seneca* before she was turned over to the Medical Department. It was ordered, as early as June 26, to send all transports to the States as rapidly as possible. I am of the opinion, if the *Seneca* was crowded, that it was owing to the large number of men sent on board of her from the hospital transport *Relief*, and which I knew nothing of until the *Seneca* had sailed. Before General Shafter received telegram from the Secretary of War concerning alleged crowding on the *Seneca* I told him that such would be the result of surgeons giving passes without my knowledge. General Shafter directed Colonel Pope, chief surgeon, to order the surgeons not to give passes without informing me. I referred to transports sailing for the United States other than those turned over to the Medical Department, free of passengers, like the *Olivette*, *Iroquois*, *Cherokee*, *City of Washington*, and others; for upon this class of vessels I do not think I ever gave a pass. The *Seneca* had passengers on board and was handed over to the Medical Department for such use as it could make of her. But I charged Captain Decker (and he knew it was his duty) not to take any man on board unless he had a pass. I have since learned that men came north on her without proper authority.

Q. Was there any action taken in the matter toward this captain for permitting these people to come on board without authority?

A. I have not seen him since, except for a few moments at Santiago.

By Captain HOWELL:

Q. The testimony before us is that these vessels sailed under your orders; that is, you gave instructions when they should be sailed.

A. Going north?

Q. Yes, sir.

A. Yes, sir; under my orders.

Q. One of the witnesses testified that there were not sufficient stores on the *Seneca*, and that she went back—that is, Miss Jennings went back—to get stores from the Red Cross, and the captain told her he had to sail when you ordered.

A. Without good reasons for acting otherwise I gave transports sailing orders, ordering what port to make, etc. This was from telegraphic information from the Adjutant-General's Office, but I never fixed the time of sailing for the transports turned over to the Medical Department. When the *Olivette*, *Iroquois*, *Cherokee*, *City of Washington*, and others sailed I gave no order naming the hour of departure.

Q. We are speaking of the *Seneca*. You did not order that one to leave?

A. Not further than as to destination; nor any vessel turned over for the sick and wounded, unless it was authoritatively reported to me that the vessel was ready to sail.

Q. Were these transports turned over to the medical department?

A. Yes, sir.

Q. And you had nothing more to do with it then?

A. Not so far as the reception of sick on board was concerned, and that covered about everything in connection with them; it certainly covered sailing orders, as to the time of the ship's departure.

Q. Did you give orders where the *Seneca* was to go to?

A. I think I did. I had an order from the War Department to send a certain number of vessels to Port Tampa; this was being carried out, but was stopped because the vessels were quarantined there. Then instructions were given to send transports to Newport News, and subsequently to New York. Whatever orders General Shafter received from the War Department, and gave me, I acted upon.

Q. There has been complaint about certain ships—I will name them; of course there are others: The *Seneca*, *Concho*, *Breakwater*, and *City of Washington*. Now, do you know about those ships that sailed from either Siboney or Santiago, or wherever they sailed from?

A. I should say the *City of Washington* was always clean. I judge that from the captain of the ship largely.

Q. You do not know of your own knowledge, do you?

A. I always claimed she was taken by the medical department—the *City of Washington*.

Q. I want to know the facts. If these vessels were in improper condition when they carried these convalescents north; whether or not they had ice——

A. There was no ice, unless the Red Cross gave it to them.

Q. You had no ice there?

A. With the expedition?

Q. Yes, sir.

A. No, sir. At the time the *City of Washington* and the *Seneca* left there was no ice.

Q. Wasn't there a schooner of ice sent there?

A. No, sir. The first schooner of ice came in July—July 30.

Q. Did you supply them with water?

A. I had two water tenders—*Kanawha* and *Stevens*—that held 85,000 and 115,000 gallons, respectively. Had taken some fresh water from the iron pier at Daiquiri. My report herewith shows all that. The *Seneca* had water, taken at Jamaica, and the *Concho* had water.

Q. Was it or not water they took from Tampa with them?

A. Not all of it.

Q. What we want to know is this: Whether these complaints about the condition of these vessels that carried the convalescent soldiers from there, especially the ones I named, and any others you may know of, whether they were in proper condition to take care of these men and make them comfortable?

A. I should say, if I had not heard to the contrary, they were. I do not know about the *Seneca*, because of the numbers on board that I knew nothing of at the time. I received orders July 22 to send a ship from Santiago to Siboney to take sick and wounded men north. I sent three ships, the *Concho*, *Rio Grande*, and *Leona*, all fine, large ships. They loaded down one ship, put a few on the second ship, and none on the third. The *Concho*, *Rio Grande*, and *Leona* were the three vessels.

Q. Were those three loaded with convalescents?

A. No, sir. The *Concho* was reported overloaded; the second vessel had a few men put on board, and the third came north without any men from the Siboney hospital.

Q. Without any?

A. Yes, sir; without any, if reports were true.

Q. Who is to blame for that?

A. I am not ready to say.

Q. Somebody was?

A. I do not believe Dr. Le Garde could have been, though he was in charge of hospital there.

Q. Were the men permitted to go on any boat they wanted?

A. No, sir; the ships were turned over to the Medical Department, and I should say the men received their orders from that department.

Q. Then, if the ships were improperly provisioned and did not have proper accommodations to take care of the sick, the Medical Department is to blame?

A. There might have been no provisions, deemed best for sick men, at hand, or materials and labor to arrange what would be considered by some proper accommodations for the sick.

Q. If there were?

A. I should say yes, if the Medical Department has a ship turned over to it which requires such changes, and makes no application to the Quartermaster's Department to have the changes made, and no application to the Subsistence Department for proper food, and fails to supply from its own stores if it has them.

Q. Suppose this state of affairs—I am putting to you facts that came out in evidence: If supplies and provisions were not supplied by the Government, and it was found on the vessels that they did not have the supplies on the ship, whose duty was it to have the men served from the supplies on board?

A. It was the duty of the senior army officer present, the surgeon in charge of the men having ascertained such to be the fact and reported it.

Q. We have testimony from a witness here who was there with a relief society, who swears he spent \$272 out of his own pocket to buy necessary subsistence for the sick men on the vessel. Now, if that man, belonging to a relief society, could buy it, could not the Government?

A. Certainly.

Q. And should not the man in command of that ship have gotten it?

A. The senior army officer present?

Q. Yes.

A. Yes.

Q. Suppose he had thirty-five convalescents and the Medical Department or Government did not supply these men with proper food, and the crew of the vessel had certain canned goods on hand, could not the Government officer have gone to the captain and said, "I want those supplies," and given him an order on the Government for it without calling on this man to buy it with his own money?

A. Certainly. What ship was this on?

Q. *City of Washington*.

By Dr. CONNER:

Q. In the first place, were these three ships you have mentioned as being turned over to the Medical Department, turned over formally and by order to the Medical Department, or was it simply that the Medical Department was notified that these vessels were ready for them?

A. That they would be, and subsequently that they had been sent to them.

Q. On board the *Seneca*, I understand, there was at least one line officer of higher rank than any medical officer on board. Was the fact of convalescents being on board that ship—did that fact put the ship under the command of the medical officer or under the command of the senior line officer on board?

A. The senior line officer should have assumed command had there been cause for such action.

Q. Then, under those circumstances, what authority had the medical officer to order anything?

A. What authority?

Q. Yes, sir.

A. Well, he certainly would not have been prevented from doing, or requiring to be done, anything of the kind, if necessary.

Q. Had he any right to issue any order, except with reference to the sick?

A. I should say no, not to officers of the Army.

Q. What then?

A. He should have advised with the commanding officer.

Q. And suppose the commanding officer did not take his advice?

A. Oh, they generally do, on purely professional matters.

Q. Suppose he refused?

A. A commanding officer would not do that unless there were good and sufficient reasons for such action.

Q. A commanding officer has, time and again, at posts, disregarded the advice of the medical officer. I want to get at the general authority. As we understand, there were plenty of proper supplies on board belonging to the ship itself; now, were they under the control of the Army or entirely personal and under contract—

A. Belonging to the company owning the ship.

Q. (Continued). And under contract; they belonged to the owners of the ship?

A. Yes, sir.

Q. And could not be secured except by permission of the ship's officers?

A. If there was military necessity, the supplies could and should have been taken.

Q. If there was a colonel of the line on board and men had not the necessary supplies, had that officer the right to seize the provisions belonging to the ship's owners?

A. Yes, sir.

Q. Is it his duty to do so under those circumstances?

A. Yes, sir.

Q. Then, if the men were not supplied with the proper food and rations the responsibility rests with the senior line officer on board?

A. I should say so, provided he knew such to be the fact, and ample and proper food was in the ship. If you are speaking of proper rations that might have come from shore I should say the senior officer in this case had nothing to do with the matter.

Q. I do not mean that. If there were supplies on board he had a right to seize them?

A. Yes, sir.

Q. It lies with the senior officer—

Colonel DENBY. Do you mean simply that a man aboard there with a colonel's stripes, or assigned to that ship?

Dr. CONNER. On board with the stripes.

By Colonel DENBY:

Q. If Colonel Van Horn was on board simply as a passenger, or convalescent, or was on board as an officer in command—which was he?

A. A passenger on board—he was on leave. I saw him there July 11.

Q. Dr. Conner is going on the theory that this colonel had the power and authority to control that ship. Now, would that colonel, simply because of his being aboard, have power to control that ship?

A. As the senior army officer on board it was his place to assume responsibility connected with an emergency.

By Dr. CONNER:

Q. If passengers could be supplied with a very good table, and the sick were not supplied with what they needed, the responsibility for that condition of things rests upon the senior line officer on board?

A. I should say so, if he was informed or knew of the fact.

Q. If he was informed to such an extent that he knew the men had not blankets

which were needed to protect them from lying on slats, and he refused to give blankets belonging to his own command, was he or not derelict of duty?

A. I should say he was, providing he could properly have supplied the blankets; but I can not imagine such a thing to have happened.

By Captain HOWELL:

Q. Now, General, these transports that I called your attention to that carried away the wounded from the battle around Santiago; it has been given in evidence to us that these wounded men did buy canned goods on these ships.

A. Yes, sir.

Q. The proper food was not there; and you say you don't know whether they did it or not; that is, whether the supply was put there by the Government? Was there any official recognition taken by your department of the fact that these vessels were going on this mission—carrying sick and wounded men to the United States? Was there any recognition taken of the fact that they were going to do that duty?

A. Yes, sir; in giving the order—do you mean to ask if the Quartermaster's Department should have supplied those ships with rations?

Q. Yes, sir.

A. Not at all.

Q. Did you turn any other vessel over to the Medical Department?

A. I turned a good many over. Three at one time were turned over to them. I was not directed to turn over more than one at that time.

Q. The *City of Washington*—

A. She was taken by the Medical Department while I was at the front.

Q. Didn't you have an officer on hand to represent the Quartermaster's Department?

A. Yes, sir; Lieutenant Roudiez was there, in charge, in my absence.

Q. Was there any quartermaster on board?

A. No, sir; not after the troops debarked.

Q. The medical officer was really in charge?

A. Yes, sir; of the sick, and everything in connection with them.

Q. He put on what supplies were put on?

A. He selected the supplies, if on hand.

Q. If there were sick and wounded and convalescent men on a boat and the Medical Department had not supplied it with provisions, and there were provisions belonging to the captain or the steward of the boat, or the crew, was there any other way to get them than for these wounded soldiers to buy them?

A. The provisions should have been taken as a military necessity by the senior officer on the vessel and, of course, paid for as soon as practicable. His orders to any officer, man, or men to take them would have meant the same.

Q. Whether designated or not?

A. Yes, sir. That don't excuse an officer from doing his duty. It was his duty, if an emergency arose requiring it, to take the supplies for the men. But I don't see why there should have been necessity for such action. If the ship's stores were needed by the troops there should have been no trouble in purchasing them. No money was needed—a statement of the purchase and the value of same, in form of a receipt, signed by an officer and given the purser, was all that was required to get stores the ship could spare. The ship was turned over to the Medical Department and undoubtedly it was fitted out as well as could be at that place and time by drawing or purchasing from the Subsistence Department such articles as were desired and could be supplied.

Q. There were no complaints made after the vessels went into Santiago and were regularly inspected.

A. Men fit to travel are supposed to carry their rations (travel rations); I do

not refer to sick men. Convalescents, naturally, would draw rations or the equivalent for them in some form or other.

Q. They are not required to carry their rations?

A. They would draw their rations if going on a ship, or rather such food as the surgeon in charge considered best for them.

Q. They did not, though?

A. I can not say.

Q. You say they were expected to draw their rations?

A. Yes, sir; that is, rations or other proper food, if obtainable; to draw or purchase it for the sick. The Government allows sick in hospital 60 cents per day in lieu of their regular ration.

Q. How about the wounded men?

A. Same applies to him if he is in hospital.

Q. That is, it is presumed they were?

A. Well, I imagine whatever could be had was put on board the ships for them.

By Governor WOODBURY:

Q. If the *Concho* was overcrowded on her trip north, please state whether or not it was because the Government had not provided sufficient transportation, or whether it was through an error of judgment in the medical officers loading her.

A. It was through an error of judgment, because there were two other ships they might have used—two equally good ships.

By General DODGE:

Q. Referring to the loading of the ships at Tampa, here is a paper submitted as part of Captain McKay's testimony, giving the loading of each ship.

A. That is my paper, I think.

Q. Giving the number of men he had and what each ship was loaded with?

A. Yes, sir; so far as applies to the officers and men.

Q. That is the paper you refer to?

A. Yes, sir; I think it is part of the memoranda I made and on which was based the tabulated report of the fleet and about everything else pertaining to the expedition, and which I gave to General Shafter on the 19th day of June, three days before we landed, and to several officers of the expedition.

Q. Now, when Captain McKay testified here, he presented that paper as the order he received—except some changes made afterwards—as the order in which they were to go on board the different ships.

Governor WOODBURY. And he said that was handed to him by General Humphrey.

General DODGE. Or one of his officers.

A. Not at that time; he is mistaken; it was taken from this [referring to another paper]; changes were made—for instance: The Seventh, Twelfth, and Seventeenth Infantry embarked on the *Iroquois*, *Cherokee*, and *D. H. Miller*—this shows also that one company of the Seventh and two companies of the Seventeenth were changed to the *Comal* and *Manteo*, respectively. That was a memorandum for my report, as stated above. McKay is mistaken in regard to that. I took personal charge of the embarkation. He and several officers assisted.

Q. What did Captain McKay do?

A. He was capable of doing everything in connection with fitting out the fleet, embarking and debarking troops, animals, stores, etc. He was a man of the greatest use to us—always reliable, industrious, and active—a sea captain by profession, he was equal to the performance of the duties assigned him.

Q. Did he know the ships on which they were going in Tampa?

A. Not the identical ships; there was no necessity for knowing, in most cases. He knew light artillerymen would go on the transport with their horses, etc., and knew the transports upon which officers' horses and mules would go.

Q. You were the only man who did?

A. I did not know what ships would be assigned regiments before the regiments were reported to me. I knew the ships that would be used by brigades and divisions.

Q. How did you put them on board?

A. General Shafter telegraphed or telephoned me what regiment was coming at the time it broke camp.

Q. How did an officer know what ship he was to go on board?

A. When the regiment reached Port Tampa he was informed. I understood Colonel Bisbee did not know his command was to go on board the *Segurança*—the flagship. The whole command knew it, and some thought General Shafter was showing favor to his old regiment; it was less than 500 strong, and it was put on one of the largest ships in the fleet; so if Colonel Bisbee said that, he is mistaken; I told him myself. I told Colonel Roosevelt he could have the *Yucatan* for his regiment, which already had headquarters and a battalion of the Second Infantry assigned to it. I told him he might find her a little crowded at first. He replied, in effect, "We will go in the rigging if you will only let us go aboard." The Seventy-first New York I assigned to the *Vigilancia*; she was one of our largest ships and the Seventy-first New York was one of the largest regiments.

Q. You knew the strength of these regiments and fitted the regiments to the ships?

A. Yes, sir; as nearly as practicable. We knew the volunteer regiments were strong; the regular regiments, with the exception of the Seventh Infantry, which had a good many recruits, were what one might call weak.

Q. Now, when you were at Santiago, or Siboney, was there any difficulty in relation to ascertaining—that is, any person applying to you—where any supplies were on a given ship? Was there any difficulty in your giving information?

A. No, sir, except in relation to medical stores. I have a list here prepared for the original loading. It shows three field hospitals were to be loaded—medicines, tents, furniture, mules, horses, wagons, ambulances, etc. It did not all materialize. The First Division hospital had some tents, medicines, and some furniture. The others had little but medicines in panniers, which I saw on board and thought it belonged to the regimental surgeon aboard that ship. The First Division hospital was put on the *Santiago* and unloaded at Siboney by Major Robertson on the 25th of June with that part of General Kent's division which had been embarked on the *Saratoga*, *Santiago*, and *City of Washington*. The troops had been lying since the 22d of June off the mouth of Santiago harbor, to cause the enemy to think we intended to land troops west of the city. There were medicines on the *Iroquois* and *Rio Grande* in panniers. The three field hospitals before mentioned consisted of 12 medical officers, 90 enlisted men, 30 ambulances, 18 escort wagons, 72 mules, 60 hospital tents, 3 wagons, furniture and supplies, and 15 saddle horses and equipments. They did not materialize in a way to give us the impression they were field hospitals. I saw panniers with the troops when they were embarked, and they could have gone to the front with the troops on pack mules as well as the ammunition and rations.

Q. The surgeons complain here that they were not allowed any pack mules?

A. That would lie with General Shafter, and I can not believe it if he were informed of the necessity.

Q. If they had applied to you for pack mules to take panniers to the front were you prepared to give them?

A. Yes, sir. Major Jacobs, or any officer there, would have done the same.

Q. Then there was no denial of such requests?

A. No, sir; not so far as I know.

By Dr. CONNER:

Q. Did you furnish any pack mules to the Medical Department during the first week?

A. I, myself?

Q. Or your department?

A. I can only say for myself.

Q. Would you have known it?

A. Not necessarily; my special work lay with the ships; but Major Jacobs and others were good officers; they would have made an effort to supply the Medical Department at the front with medicines if requested to do so.

By Governor WOODBURY:

Q. Did you know, before the regiments reached the wharf at Port Tampa, upon which vessel each regiment would be loaded?

A. Not further than as General Shafter telephoned or telegraphed me of their breaking camp.

Q. If you assigned a certain regiment to a ship and it did not come, then you put the first other regiment on her?

A. Yes, sir; if the ship was of suitable size.

Q. Now, in regard to the Rough Riders. Did you know before they came upon what vessel they were going?

A. I did not intend to give them alone one of the largest ships.

Q. Do you remember pointing out into the canal to General Wood and saying: "There are two vessels going, the *Yucatan* and the *Allegheny*, you can take one of them."

A. I don't remember the conversation. I could not have said anything to General Wood regarding his regiment taking the *Allegheny*, for that ship was fitted up with stalls, and was at that time loaded with 151 private horses. The ship carried also General Wheeler's headquarters and men enough to take care of animals—14 officers and 80 men. I had a conversation with Colonel Roosevelt and I told him he could take the *Yucatan*; that there was a headquarters and battalion of another regiment there. As a matter of fact, the *Yucatan* came into the canal and lay alongside the *San Marcos*. It had not been necessary to take the *San Marcos* from the pier.

Q. You gave him a particular vessel, and did not give him a choice of two?

A. Yes, sir; I gave Colonel Roosevelt a particular vessel, in part. Had General Wood asked me for a vessel there could have been no reason for Colonel Roosevelt's asking for one.

By Dr. CONNER:

Q. Was it necessary for the commander of the Rough Riders to seize a row-boat and go out into the stream and seize the vessel?

A. No, sir; he did not seize the vessel. There were headquarters and a battalion of the Second Infantry also assigned to that vessel. Lieutenant-Colonel Wherry, now General Wherry, was in command of the Second Infantry. He ranked Lieutenant-Colonel Roosevelt by several years.

By Captain HOWELL:

Q. I want to ask you a few questions in regard to the congestion at Tampa.

A. Yes, sir.

Q. It has been testified that a great many of the supplies that went to that port (to Tampa) were sent there without bills or invoices?

A. Yes, sir.

Q. And that the officers there did not know what was contained in the cars?

A. Yes, sir.

Q. Did that contribute any to the confusion?

A. Some. That was corrected afterwards. If cards had been on the cars it would have been better—showing what was in them; but as to the invoices, that was not possible for them to be there.

Q. For instance, they said if you wanted to find tents you did not know where to find them?

A. Yes, sir; but more with reference to smaller articles.

Q. Were the cars not banked on the track for 3 or 4 miles?

A. Yes, sir; and miles farther.

Q. One officer testified they were backed up as far as Columbia, S. C.

A. I found forty cars on a little feeder of the Florida Central—miles east of Tampa.

Q. Now, this connection—in regard to making the connection from the Florida Central and Peninsular road to the Plant System—that caused also confusion?

A. Yes, sir. A great deal of stuff was coming by the Florida Central and Peninsular and it was difficult to get it transferred to the Plant line to get it down to Port Tampa. There was opposition on the part of the Plant System, and the single-track connecting road in one of the streets in Tampa was not sufficient; and, then, the connection between the two had a short curve—in fact, so short that the Plant System made the excuse that they could get only 4 or 5 cars over it at a time. I told them that they could run 40, 50, or 60 cars in a train over it, while it might not hold more than 5 or 6 cars. The two roads come nearly together like this [indicating converging lines], and then branched off here into Tampa.

Q. The Plant System agreed to do it when they were assured by the Government that when it ceased to be used for Government purposes it would be taken up?

A. Yes, sir; after great inconvenience and trouble. It has since been taken up—so I was told.

By General WILSON:

Q. General, in reference to the unloading of the troops when the transports arrived near Santiago, will you describe the methods and means at hand for doing it?

A. Well, the unloading of the troops—that is, the men with their blanket rolls, three days' rations, ammunition, and rifles—were largely landed by the small boats of our fleet and the navy. There were 153 boats in our fleet, enough to carry 3,000 men; they were the lifeboats of the ships. Besides these we had the *Laura*, a steam lighter that would carry about 400 men standing. The navy helped a great deal with their steam launches and boats. Many boats—six or eight—would be hitched together and a steam launch towed them in.

Q. You had 153 boats; but how many boats' crews did you have on hand to manipulate them?

A. The men worked them largely.

Q. The enlisted men?

A. Yes, sir.

Q. Do you think you could have handled the transports there without the assistance of the navy?

A. Yes, sir; without great trouble. The commanding officers of regiments, batteries, and battalions would have unloaded without great trouble.

Q. In a reasonable time?

A. Yes, sir. The navy helped while they worked, but the unloading went on until it was too dark to longer see. They quit at 6 o'clock.

Q. Who quit at 6?

A. The navy. They helped us a good deal, but the unloading went on after they left for their ships and until it was too dark to see. The navy, the following

day, did not give us the assistance they did the first day. That was noticed by many army officers.

Q. How long did it take to disembark the entire command?

A. By the close of the 23d nearly all, if not all, the infantry and cavalry off Daiquiri had landed. The light batteries did not land until later, as their horses had to be taken off with them. As before stated, the landing of pack and wagon mules began early on the afternoon of the 22d. Forage had to be landed at once for animals.

Q. That meant within forty-eight hours?

A. Yes, sir. Of course there was that part of General Kent's division lying off Santiago Harbor to give the impression that a landing would be made west of Santiago. That did not land until the 25th, and then at Siboney.

Q. Did you see the Inspector-General?

A. General Breckinridge?

Q. Yes, sir.

A. Often.

Q. How long did he stay there?

A. He left the expedition on the 20th of July on the transport *Hudson*. He left after we entered Santiago. He came into the city and looked around generally.

Q. Was there any inspection under his authority of the vessels going with wounded and convalescents?

A. Not that I know of.

By General DODGE:

Q. Why were not the cars, as they were run into Tampa, unloaded as fast as they arrived?

A. There was stuff we did not want at once. That was one reason.

Q. Then did not your congestion at Tampa come from the fact that you did not unload the cars?

A. No; I should not have said that exactly. Colonel Bellinger would be a good witness regarding that matter. When I went to the depot I took in hand, personally, the equipping of the troops, and everything required that the department did not have I gave the regimental quartermaster authority to buy. They purchased, certified the bills, and sent them to my office for payment. In that way I furnished many supplies and greatly facilitated the equipment of the troops. I did not come in contact with the railroads at all until trouble arose, and then as chief quartermaster I had considerable to do with it. But my work was mainly in connection with the fitting out of the expedition, either by purchase or from stores and supplies sent me.

Q. Well, naturally, if a railroad was running in trains of supplies every day and they were not unloaded it would be but a short time before a congestion occurred.

A. That is true; but the congestion could have only slightly come, if at all, from cars delivered to me and not unloaded at once. I referred to a train of rifles and ammunition that were kept locked in cars for their greater safety and protection. The train was on a side track on Picnic Island, and demurrage was paid for it. Commissary stores often came in incomplete rations, and were held until other stores came to complete the rations before placing them on the ships. Again, it was absolutely necessary to hold commissary stores, etc., in cars for a short time, or unload and protect them from the weather (which was scarcely practicable), only to be reloaded in a day or so. This was all very annoying to us and the Plant System, but it could not there be otherwise, owing to our surroundings, which governed. This was at Port Tampa. With the good will of the railroads for each other, proper and sufficient terminal facilities, and good management east and north of Tampa, there would have been no trouble.

Q. Now, I want to ask you in relation to Captain McKay. What authority had he at Santiago and Tampa?

A. He was my principal assistant. He came to me by order of the Secretary of War and was a most valuable man. He had been a steamship captain, and a United States marshal more recently. He was an exceedingly level-headed man. At Port Tampa, and subsequently in Cuba, his range of duties with ocean transportation were exceedingly great. He did everything an exceptionally good man could do in that very responsible position.

Q. When he arrived at Santiago he still acted under you?

A. Yes, sir.

Q. Was he engaged in getting supplies from the ships?

A. All the time.

Q. If any officer applied for anything he would get it?

A. Yes, sir; if practicable.

Q. He did not have to go to you?

A. No, sir; I was miles away much of the time.

Q. And they got their supplies through him?

A. Yes, sir; he was continually unloading ships. Supplies were gotten from the officers responsible for them, generally speaking. He was an able-bodied man, but has not been so since last July. He was too obliging sometimes, I thought.

Q. He always got them for them?

A. Yes, sir; so far as I know; his natural disposition is to accommodate.

Q. There is a good deal of testimony in relation to Capt. E. L. Munson, who had charge of the landing of the supplies for the Medical Department. He made application to the quartermaster there—he did not state it was to you—but he says it was impossible for them to obtain any boats of any kind to go to the ships for these supplies.

A. If that is at Siboney it may be so. I gave the only steam lighter, the white stevedores, and the best of the black ones to Colonel Weston to land subsistence supplies. Now, mark you, I don't know upon what day this alleged occurrence took place. The *Olivette* was there. She was a hospital ship with eight lifeboats, and I was surprised on more than one occasion to see those boats covered in—not swung at the davits for lowering. Furthermore, she had a launch, given or lent to the Government by Mr. Hearst. Now, when the *Relief* came in she came fitted out in every way; she had boats and one steam launch; it is said she had two. The quartermaster to the surgeon in charge of the *Relief* was Lieutenant Crabbs. He was on leave for the summer from West Point, and went on that duty voluntarily, I understood. He told me one day that he wanted boats to land supplies from the *Relief* for La Garde's hospital. This was at Siboney. I asked why he did not use his own boats, and he gave some good reason, I presume, and asked for the use of pontoons. I told him the engineers were using them in the construction of a pier; that the boats were not in my charge, but he could undoubtedly get them or others from the *Alamo*; that Captain Burr was in charge of the boats, and if he could not see him and there was any failure on the part of the captain of the vessel to furnish the boats, to seize them. Lieutenant Crabbs had no difficulty in securing the pontoons from the vessel. I do not know if he saw an engineer officer at that time. They were always ready for duty and to lend assistance.

Q. Now, on the *Olivette*, the excuse they had there for not handling their boats was that they had but one boat's crew?

A. That is pretty nearly so, but they had more than one, and they had a steam launch.

Q. And for that reason they could not use their boats?

A. We had great trouble getting employees. There were only four stevedores to a ship, and they rapidly dropped out in numbers on account of sickness. We had 100 darkies, taken from Port Tampa. All of them did not intend to work, and as soon as landed many ran away, going as officers' servants and camp followers. I think the *Olivette* did not have enough. I think there were many things which we could do much better if we had it to do again. I do not think the authorities in Washington took into consideration the great amount of sickness we would have, and the large number of extra men we would require for that reason. A great many stevedores, teamsters, and packers were soon sick, which was brought about by fatigue from working days and nights. A particular instance was when I was returning from Guantanamo Bay, the 11th of July. Being off Daiquiri about daylight, I landed to see how affairs were going there. I found Major Jacobs and some 60 men sick. There were about 250 mules to feed and care for and only 17 men for duty; 14 wagons were loaded and sent to the front, leaving 3 men to take care of animals. I hurried to Siboney and wired General Shafter; he ordered me to get a detail from a detachment of recruits that had just arrived, for the Twentieth Infantry, I think. That was the best he could do at the time; and men were detailed to drive six-mule teams who were not teamsters fit for that work. There were a thousand and one things one could not have arranged for beforehand; or if foreseen, could not have been met without more time and at great expense.

By Captain HOWELL:

Q. Didn't you find trouble in getting men to drive six-mule teams?

A. Yes, sir. I was in favor of the transportation being divided into four trains—one train for each division of the army—and a reserve train; but one reason why it was not done was that the road from the base to the front was narrow and trains would meet at impassable points. We had to fix hours for trains going west and for trains going east. Some places on the road were so deep and narrow that a man on foot could not pass a wagon. Division trains would have secured better teamsters by the detail of competent soldiers.

By Dr. CONNER:

Q. As I understood you this morning, you stated that the medical supplies were so small in amount that they were almost unnoticed.

A. I meant in comparison with other property; I saw only panniers, and they being with the troops, it was right to think they belonged to these troops (and I still think so), and not to a general or special hospital. If medical officers in charge of division or field hospitals had seen fit to hand me a list, as nearly correct as possible, of the stores and property taken by them; or, if they had reported same to Captain Quay he would have checked it when loaded and handed in a list of it, which would have appeared in my tabulated report of June 19, as does the number of troops, animals, vehicles, amount of quartermaster's, commissary, and ordnance supplies, etc., with names of ships on which carried and the hold in which the various supplies were placed. Medical supplies in hands of regimental surgeons, like quartermaster's, commissary, and ordnance supplies in hands of regimental officers, did not require reporting. There is a good deal of equipment, stores, etc., in a fully equipped field hospital.

Q. Were there any considerable amount of stores besides those medical supplies—besides those hospital chests or panniers, that you know of?

A. No, sir.

Q. You spoke of receiving a division hospital on shore?

A. That was the one under Dr. Wood's charge, landed by Major Robertson.

Q. Did that hospital have any tentage with it?

A. Yes, sir; I should judge so from the memorandum I have.

Q. Do you not know whether it had?

A. No, sir. I took all of the tents of the Ninth United States Infantry and Thirty-third Michigan Infantry, and from other troops, for hospital purposes.

Q. These supplies for the division hospital were landed pretty quickly after the troops reached there?

A. They arrived at Siboney the 25th of June, and were landed by Major Robertson at once.

Q. Was any arrangement made for transporting these to the front by means of pack mules or wagon trains?

A. I was not at Siboney at this time; there must have been, inasmuch as I saw this hospital at the front as early as July 1.

Q. Do you know whether your department had the means at that time of transporting this hospital?

A. Do you mean the 25th of June?

Q. Yes, sir.

A. All pack trains were landed at Daiquiri before that date.

Q. It is in testimony that after the first three days the only supplies this hospital saw were such as were carried by hand and on the saddles of horses. Do you know whether that is correct?

A. No. I should say it was not correct. Pack trains were landed before that time; they were landed before the private horses of officers, and there were no other horses excepting those belonging to the Second Cavalry (mounted) and the light batteries.

Q. The testimony is that it was impossible to obtain from the Quartermaster's Department the transportation; and these were taken by men of the hospital corps, not less than forty men carrying them by hand, and on the individual horses of the officers; and those were the only ones they had for three days.

A. They should not say the Quartermaster's Department. The orders of General Shafter were to get ammunition and rations to the front—preferably ammunition—as the men had orders to land with three days' rations. There was not a pack mule on board any vessel by the night of the 23d of June. Pack trains were going to the front before the 25th, I think.

Q. Do you know whether or not on the night of the 1st of July, after the first fight, this hospital of Wood's had any hospital tents?

A. If you mean the First Division hospital, it certainly had "flies," and I think tents.

Q. Did it have tents?

A. If anybody has said it did not, I would not say it had, though it had them on the 2d. Very early on the morning of the 3d I went to see wounded officers who were in hospital tents.

Q. The divisional hospital was landed at Daiquiri?

A. Yes, sir, the alleged division hospitals of the Second Infantry Division and the Cavalry Division, the First Division hospital (Wood's) was landed at Siboney.

Q. Did this division have any transportation to the front?

A. They had the same as any other, I presume. All the transportation was in the hands of General Shafter; he gave orders to Major Jacobs. I should have given transportation if the necessity for it arose and I was so informed.

Q. Did they have transportation, or is it a fact that the material of this hospital was taken by hand and on the horses of individual officers to the front?

A. They may have taken medicines that way; but no tentage, tables, panniers, or stuff of that kind.

Q. They only took what they could carry by hand; is that it?

A. I did not see it.

Q. The medical supplies for the regiments were supposed to be in panniers and chests, to be carried with each regiment?

A. Yes, sir.

Q. Do you know whether or not these chests were landed with the regiments?

A. I can not say that they were.

Q. Do you know whether or not those that were landed—

A. That would not be my business anyway. I might just as well tell an officer he could not leave the ship without his blanket roll as to tell him he could not go without his regimental medicine chest.

Q. If he had means of transportation do you think he would leave without his medical supplies?

A. He could not have told until he got on shore; he certainly had transportation to the shore. There were no panniers lying around at Daiquiri or Siboney, so far as I saw.

Q. If he had them with his regiment on board ship he would likely know whether they were transported or not.

A. The doctor?

Q. Yes, sir.

A. Yes, sir; he certainly should. It is his business.

Q. And it is the business of the Quartermaster's Department to furnish transportation for them?

A. Yes, sir; when informed by the proper authority to whom they belonged, the point, and to whom to be shipped.

Q. If a limited number of these regiments succeeded in getting their chests there, did those who got them ashore have means of transportation to carry them to the front, or did the regiments move without such arrangements as would carry these chests?

A. I could not say. The regiments moved at once, and there were no trains or pack mules assigned to regiments, so far as I know.

Q. Was it or not, then, necessary to leave behind their medical supplies?

A. Not necessarily.

Q. Could these pack mules have been secured?

A. I haven't the slightest doubt they could.

Q. Were they so secured?

A. I don't know.

Q. If they were not secured or given, had medical officers the authority to seize or get possession of or get control of them at all?

A. No, sir; certainly they could not have seized animals or trains. A commanding officer on the ground could have given orders. There was always a commanding officer at Daiquiri or Siboney.

Q. Then, as we understand, the responsibility rests with the chief quartermaster present, and above and over him the commanding general?

A. No, sir; it rests with the men in charge of the property. If I had had something to go to the front, unless I could show that I applied for means to get it there and that the means were refused me, the responsibility would rest with me.

Q. If the medical officers did so apply and were refused, were they relieved of the responsibility?

A. If they applied to the proper authority, I should think they were relieved of the responsibility.

Q. Is it or not a fact that at Siboney for days the only means for getting to the transports and getting out the medical stores, except those landed the first day, was one boat that was offered on one day to an assistant surgeon of the army?

A. I do not like the way you put the question. Will say that Dr. Goodfellow, a physician of California and volunteer aid on General Shafter's staff, was sent with a light-draft steamer to various transports to gather up panniers. He was

not sent by the Medical Department, nor had he any special connection with it. Captain McKay was also sent to various transports to bring ashore medicines, which, like those Goodfellow got, should have been landed with the troops or at that time. Much company property was brought ashore with the troops. There was but one steam lighter at Siboney and it was fully employed during the day and much of the night; all other lighters were likewise employed at Daiquiri. Transportation to vessels would have been given the assistant surgeon had he presented the matter to an officer, who would have attended to it, though it was often difficult to furnish such transportation at once. Nothing was landed at Siboney before the 25th. Transports were lying off Daiquiri as well as Siboney; more were at the first-named than were at the latter place.

Q. It is testified that every essential article was on hand and went with the fleet, and that it was not all landed when he left on the 10th of July—

A. Who was that?

Q. Dr. Munson. He says he could not get transportation from the Quartermaster's Department, although he had twice applied personally. Then he was asked, "Did Dr. Pope make application?" and he answered, "I don't know; I was his representative. I was told by Dr. Pope that he had made application at Daiquiri and that he could not get anything, and that the only transportation that was given us was one small rowboat, which was turned over to Dr. Pope and by him used in the collection of medical supplies from the transports. This boat was taken away after accomplishing nothing, for we were directed to return it to the ship at once, as the boat was needed for other purposes." Is that or not a correct statement of the facts existing at that time and place?

A. I do not think so. He had had himself interviewed, and attempted to defend his department by blaming another.

Q. Whom did he ask for the transportation, and at what time?

A. It's exceedingly easy to make a general charge of the kind if one does not object to that line of conduct. No one applied to me for anything I had the power to grant and was refused. I do not think Dr. Munson applied to me for anything at any time, either at Daiquiri or Siboney, nor am I willing to think that he applied to any of my assistants at either of those places and was refused if it was possible to comply with his request. Personally I was absent from Siboney a good deal; from the 1st of July to the 3d I was at the front; the 3d I returned to Siboney and proceeded to Daiquiri to land siege mortars and ammunition there, and send heavy artillery battalion to the front; was at the front on the 5th and 7th of July, when I returned to Siboney and went to Daiquiri to land siege guns and send them to the front; the 9th I went to Guantanamo Bay, to inspect ground for a large camp, returning to Siboney the 10th. There were efficient officers of my department at Siboney and Daiquiri, and I can not believe that Dr. Pope was denied transportation to land stores. Enormous amounts of quartermaster's, commissary, and ordnance stores and supplies were landed; why not the medical supplies, if there, as well. I very often heard it said that the reason more hospital stores were not landed was because they did not have them there. Dr. Pope was, like myself, on General Shafter's staff, and on board the flagship. My tabulated report—the Adjutant-General's copy—lay for days on the table in that part of the saloon used for the office, and was common to all. Why did not Dr. Pope call my attention to his stores then. I saw Dr. Pope almost daily until the 27th of June and often thereafter, but he never mentioned to me anything about his stores, much less that they were still on the vessels or that he could not get to the front those that were landed.

Q. I am asking you about this testimony?

A. He don't say when it occurred.

Q. He goes on, "Q. So you were left without supplies? A. Yes, sir. Q. Did you yourself make application for transportation? A. It was made by the chief sur-

geon. Q. What was the answer? A. As I remember, he was told there was none available. Subsequently, two days later, he was given a small 4-oared boat, and that for only one day. It made one trip ashore. Q. That was the only transportation furnished to the Medical Department while you were in Cuba? A. So far as I know."

General DODGE. Dr. Pope testified to this—

Dr. CONNER. He testified that one regimental hospital was landed, and that was Wood's; that was a divisional hospital; and that was taken afterwards, so far as it could be taken, by hand. An assistant surgeon of the Army testified that he got his regimental supplies in front by taking them out of the panniers and taking them in part by hand and the other part on his horse, not being able to get any transportation. The testimony presented shows that the cavalry divisional hospital got a part of its supplies—only a part of its supplies—ashore. Do you know whether that is true—that not two-thirds of all the medical supplies taken on that expedition had been landed before Santiago Harbor was opened and the transports were able to go to Santiago dock.

A. Do I know?

Q. Yes, sir.

A. I do not know.

Q. They state these transports with hospital supplies were not unloaded. Do you know whether or not hospital supplies were returned to this country after being in Cuba?

A. I do not think so. I saw the *Iroquois* unloaded when she returned to Santiago after coming north as a hospital ship. There was nothing of the kind taken off her, unless a pannier or so, which should have been taken off at Daiquiri when the troops were landed. The *Iroquois* carried a part of Lawton's division. Orders were to debark this division first, and she left for the north on the afternoon or evening of the 2d of July, having been turned over to the Medical Department. She took sick and wounded to Key West, went to Fort Monroe, and then returned to Santiago and unloaded camp and garrison equipage and a large amount of commissary stores (officers' stores). I saw no medicines taken off her at Santiago, nor do I believe any worth mentioning were.

Q. Do you know whether or not any medical stores and supplies or medicines that you took from Tampa were landed prior to the 10th of July?

A. How was it possible that medical stores were not landed before that in view of the fact that use was made of them before, during, and after the battle? I do not know what was taken in the way of medical stores, nor do I believe anybody in the expedition knew what was taken. These hospitals were to go on the *Santiago*, *Iroquois*, and *Rio Grande*, and I could not tell how much of them it had been decided to take when they failed to appear intact; and when I saw the panniers on the *Iroquois*, which was the first ship of the expedition loaded, and subsequently panniers on the *Rio Grande*, I supposed they belonged to the troops on the ships. There were no tents or furniture that I saw—only panniers, and the loading of whatever hospital stores, etc., that were placed on the *Rio Grande* and *Iroquois* was done at the same time as the troops on those vessels embarked. The *Olivette* was a hospital ship, and presumably had on board most of the general hospital supplies. She had no quartermaster's, commissary, or ordnance stores, nor had she any troops.

Q. As we understood you this morning, three ambulances were taken from Mobile, and possibly four more went with the command. Do you know whether those four were taken?

A. I am not sure.

Q. The statement is that three ambulances went with the expeditionary force that came from Mobile, and ten more at Daiquiri, which got to the front on the 2d of July, or the night of the 1st. Was it by your order or an order

received by you from General Shafter that these ambulances were left on shore at Tampa?

A. General Shafter's—I won't say that. I loaded what came to me. To be more precise, would say that Major Jacobs and his assistants loaded the wagon transportation.

Q. So you received no order to leave the ambulances behind?

A. Of the thirty which I had noted, not more than four were sent down, as I remember. My memorandum for the embarkation also shows that 16 regiments of regular infantry, 6 regiments of volunteer infantry, and 44 troops dismounted cavalry were to go; nevertheless I embarked 18 regiments of regular infantry, 2 regiments of volunteer infantry, and 48 troops dismounted cavalry. No orders for this change were received by me. I loaded everything that came to the pier.

Q. Was any order issued by the commanding general and sent through you directing that the ambulances be not taken?

A. I remember General Shafter talking about the animals, and he said none were to go with the ambulances, because those with the escort wagons having the same harness could be used for either. But, now, with reference to that, I have never seen but one order for a division hospital to go down there. This is the only order I saw. It is dated Tampa, Fla., June 7, 1898, and is addressed to the surgeon in charge of the division hospital, First Division, Fifth Army Corps [reads].

Q. Now, in regard to the transports carrying sick and convalescents; as I understood you this morning, the control was with the senior officer of the line on board the ship. Was that right?

A. Whoever he was, he was the man.

Q. If there was in charge of the convalescents only an acting assistant surgeon—in other words, a civilian with no rank and authority, or two such acting assistants, could the Medical Department, through its representatives, exercise any control whatever?

A. Yes—if necessary for them to exercise any control.

Q. If there was such a case, could they?

A. Why not?

Q. Has an acting assistant surgeon any authority?

A. He should have; he represents the United States.

Q. And, as we understand, regarding these transports, you did not give authority for all this riffraff to go on board?

A. No. I gave no passes to riffraff, unless you consider attachés, newspaper men (on the ground by authority of the Secretary of War), and a few sick employees as "riffraff."

Q. Was any considerable number of passes of the Quartermaster's Department given on these transports?

A. Not until the last—that is, later on.

Q. Were there or not some sick of the quartermaster's employees that were sent north?

A. Yes, sir; teamsters, packers, and stevedores.

Q. Was there or not, so far as you know, any proper medical inspection of transports either at Siboney or later at Santiago?

A. The vessels you refer to as leaving Siboney, and sent from Santiago to Siboney, were turned over to the Medical Department. Vessels leaving Santiago for the States before August 1 and sent north for General Miles's Porto Rican expedition carried but few passengers and were in good shape. Dr. Ives inspected all vessels leaving Santiago subsequent to August 1 and returning north with troops of the expedition. There was a board composed of Dr. Ives, Lieutenant Pershing, and myself. I had not time to serve, Lieutenant Pershing was taken sick the second day, and it devolved upon Dr. Ives. He was furnished with a steam launch and

inspected every ship until he was ordered north, when another surgeon was detailed for the duty.

Q. Was there any inspection of those transports sent from Santiago to Siboney?

A. I turned them over to the medical department there.

Q. Were they turned over to the chief surgeon, Dr. La Garde, or to whom?

A. Yes, sir; it was done by telephone message. If I was ordered to turn over a ship, as we had little writing paper, I would send a message to the officer that a ship had been ordered to report to him.

Q. Was there or not sufficient transportation to remove everything?

A. I had nothing to do with the transportation beyond the dock. I asked to be relieved of everything but ocean transportation on the 23d of July, in view of joining General Miles in Porto Rico.

Q. You were still remaining as chief quartermaster of the Fifth Army Corps, were you not?

A. I had dropped out of that. I had been appointed chief quartermaster of the expedition as early as June 14.

Q. You were all things to all men at that time, were you?

A. If you think so, I do not object.

By Captain HOWELL:

Q. What time did you leave Santiago?

A. 28th of August.

Q. You did not go to Porto Rico?

A. No, sir.

Q. Have you any record of the boats turned over to the medical department at Siboney?

A. I have it in my report and will give it to you.

Q. I want you to commence with the *Iroquois*, which was the first vessel carrying sick men from Siboney north; that went to where?

A. Key West.

Q. Can you give us a list of the vessels turned over or used for transporting sick up to the time this board was organized that you spoke of?

A. Yes, sir.

Q. Can you give a list of the men each one carried when they left?

A. No, sir.

Q. Who can?

A. I don't know; nobody but the surgeon in charge, and I don't know if he can.

Q. Nobody can tell who the commanding officer was of those?

A. That would lie with the Medical Department.

Q. Commencing with the *Iroquois*, how many boats went to northern ports with wounded and convalescent men prior to the organization of this board at Santiago?

A. My report will show we sent convalescents north with the vessels for General Miles's expedition. Between the 20th of July and until the end of the month I sent 15 vessels—

Q. That was before the organization of that board?

A. Yes, sir; but only a few went on each vessel, excepting the *Concho*.

Q. You say you can furnish us with a list of the transports taking them from Siboney and Santiago?

A. Yes, sir.

Q. Between the time the *Iroquois* sailed and the establishment of this board that inspected the vessels?

A. Yes, sir; I have it here.

Q. I don't want to know every vessel that left, but those that had sick, convalescents, and wounded. Can you make that list out?

A. Yes, sir.

Q. I want that as part of your evidence—where they left, where they left for, and, if you can, the number of persons they carried. You can give the number?

A. No, sir.

Q. If you can give it, I want to know their destination.

A. Yes, sir; I can give that.

By Dr. CONNER:

Q. Would you have anything to do with the shipment of stores to Cuba?

A. Not unless I shipped them.

Q. What was the reason that medical supplies shipped from Charleston between the 20th and 25th of July were shipped by way of Porto Rico and reached Santiago only after the 7th—the 10th—of August, instead of being sent direct?

A. I think likely the stores we reshipped on vessels taking troops to Porto Rico.

Q. Was it deemed advisable to send supplies in that roundabout way instead of by transports moving there direct?

A. I do not know.

Q. Was it expected they would be sent direct or in the way indicated? The *Grande Duchesse* and the *Mobile* sailed from Charleston not long after the 20th of July, carrying large quantities of medical and hospital supplies for General Shafter's army. Those vessels went to Porto Rico, and one was there a week and the other several days, and thence they went to Santiago, and reached there after the 5th of August, so that fifteen days, at least, and the probabilities are that twenty days, elapsed between the shipment from the port of Charleston and the arrival in Cuba, during which time the army was in such need of medicines that General Shafter telegraphed that the conditions were alarming. If those supplies had been sent direct, they would have been received long before. Can you tell me why they were not sent direct?

A. I would say the vessels were undoubtedly loaded with troops for the Porto Rican expedition. That is the only explanation I know of. I would not know anything about that. We had no mail facilities.

By Captain HOWELL:

Q. I saw a newspaper article, and it said they had provisions on her for several trips.

A. Yes, sir. There were tons sent back to New York, storehouses were full, and wharf No. 2 was sinking under the weight of commissary stores. I sent that ship back unloaded because the orders from the Secretary of War were to let nothing interfere with the sending of troops north. We did not need the stores.

General DODGE. I want to read a paragraph from Dr. Pope's evidence. The question was asked him: "When the expeditionary force landed, what proportion of your medical and hospital supplies you took with you were landed?"

A. All of the supplies that were in the field hospitals, all the supplies that were in the First Division hospitals, all of the supplies that were in the Third Division hospitals or Reserve Corps hospitals, were put on shore, together with their tentage and everything they had. The supplies of the Second Division hospital were on the steamer *Olivette*. I directed, and it was carried out after I left for the front, that all of the camp equipage and every article of stores that could be spared from the second divisional hospital be taken off and landed and added to the base hospital under command of Major La Garde, leaving the steamer *Olivette* as a hospital for constant use in receiving the wounded and sick as they came down. The supplies of the cavalry division hospital were only one-half gotten off, and so far as the medical supplies of the field hospitals were concerned, I would say they were wholly under control and could be utilized for the benefit of the sick and wounded."

Dr. CONNER. Please read what he said about the regimental supplies.

General DODGE (continuing). "Now, when we came to the regimental supplies I have a different story to tell. When I formed the field hospitals in Tampa I tried to be as liberal with regimental hospitals as I could. I allotted to each regimental organization a hospital tent, a company common tent, a medical chest and a surgical chest, a mess chest, a food chest and a commode chest, a box of surgical dressings, which I have spoken of and which I could issue to them, the understanding to be that this was a regimental outfit; was to be with the regiments in their camp; to be carried with them on the march; to be placed on the transports by the regiment; to be disembarked with the regiment and carried to the front wherever they went. It was even more liberal than the scheme authorized by the War Department. All other material brought by the commands to Tampa was absorbed into the divisional hospitals—became a part of them—and, looking at it now, I only regret that I did not take more, put it in my field hospitals, and get it on shore. It was the regimental outfits that were abandoned by the regiments in whose care they were placed, and that was the cause of our woes—the abandonment of the regimental outfits, medical supplies, and stores. Q. By whose order or authority were they abandoned? A. I don't know. I never saw the order or learned why they were left on the transports; but I do not think you will have any trouble if you inquire of the commanding officers of the several regimental hospitals. Q. Was this a general or an isolated fact? A. It was a general fact. Q. Was it in pursuance of a general order? A. I can not conceive of such a wholesale abandonment otherwise than as the result of a general cause."

Q. Now, General Shafter was asked about that and he said he was more surprised than Pope was when he heard it, and he said he got Dr. Goodfellow a launch and sent him around to the different transports to get these things, and he brought them ashore.

A. That was before the battle?

Q. Yes. Now, you state these troops brought their camp equipage—

A. Yes, sir.

Q. But they did not land these?

A. Yes, sir; in some instances large tents and company property were landed.

Q. There is no evidence about the tents. Do you know of any order prohibiting the landing of these?

A. Yes, sir. The order for debarkation required troops to carry shelter tents, and General Shafter ordered that wall and conical wall tents (tentage of the company or regiment) should not be landed. I did not consider that the order referred to tentage belonging to the hospital department, and as Colonel Pope was with General Shafter constantly, I still contend that there was no reason for it.

By Governor WOODBURY:

Q. General, what experience have you had from the time you went to Tampa until the present time in the use of refrigerated beef—personal use or knowing of its use by the troops?

A. Well, the first refrigerated beef I saw came to Santiago. The trouble was, there was too much of it. That I saw I think was good.

Q. Did you have it in your mess at Tampa?

A. No; yet it might have been there. I was boarding there.

Q. This beef you saw at Santiago?

A. Yes sir. I think it was generally good when issued. I had it taken off the ship early in the morning—the stevedores went off to the ship about 1 o'clock

in the morning, and it was on the wharf unless something happened to prevent it before daylight; daylight and sunrise come close together there.

Q. Did you see much of that beef?

A. Thousands of pounds.

Q. Did you like it?

A. I found it good; I heard much of it was spoiled when it reached the troops. The officer in charge of the wagon transportation of the Fifth Corps took it from the wharf. There was too much of that beef there; beef was sent there for an army of 15,000 or 16,000 men; but about the time the first shipload came the troops were coming north. I remember the largest issue was 20,000 pounds, and the next day 17,000 pounds, and the amount of the daily issue fell rapidly.

Q. Do you know anything about the tinned beef?

A. Well, that did not give satisfaction, owing probably to the intense heat. When a can was opened the color was not good and the odor was not sweet; yet some of the officers said they could manage to get along with it.

Q. Please state whether or not you had any suspicions at Santiago that this refrigerated beef or tinned roast beef had been treated chemically.

A. No, sir; I heard what was said, in the nature of a joke, I think; I heard it said that the juice had been taken out by the manufacturer for his extract of beef. I never heard of its being treated chemically before sold to the Government.

Q. Did you ever hear of its being treated anywhere?

A. No, sir. The process of keeping the refrigerated beef was expensive.

Q. Did you ever go into one of the refrigerators on board one of those refrigerator ships?

A. I was in the *Port Victor* refrigerator.

Q. What did you think of the quality of the beef?

A. Excellent; all I saw was excellent.

Q. When did you first hear that the beef going to our troops, there or elsewhere, had been chemically treated?

A. Nowhere until I read it in the newspapers, recently. The only complaint I heard anywhere was that the juice had been taken out of the tinned roast beef.

By General WILSON:

Q. You referred to a board, consisting of yourself and Major Ives and Lieutenant Pershing. Do you recall whether that board was organized about the 20th or 22d of July?

A. It was organized August 4, Special Order No. 57.

By General DODGE:

Q. The commission has asked you all the questions they could think of. Now, from your experience in the service, have you any knowledge or facts that would be of interest to us that you can tell us that we have not already asked you about? If so, we would be pleased to have you make any statements you may care to.

A. I don't think of anything outside of my report, where I make a few recommendations.

Q. You do make recommendations in that?

A. Yes, sir.

By General McCook:

Q. Have you made any contract during this war with Spain?

A. No, sir. I myself?

Q. Yes.

A. No, sir; I haven't been in a position to.

WAR DEPARTMENT,

Washington, D. C., October 20, 1898.

The QUARTERMASTER-GENERAL OF THE ARMY,

Washington, D. C.

GENERAL: In compliance with your instructions of September 10, 1898, I have the honor to submit the following report of the operations of the Quartermaster's Department under my charge, in connection with the expedition to Cuba, under command of Major-General Shafter, its preparation, embarkation, debarkation, and supply, and finally its reembarkation for return to the United States.

In connection with this report attention is invited to accompanying tabulated statements, as follows:

1. United States transports, their commanders, tonnage, draft, water and coal capacity.
2. Number of days' coal aboard transports, if steaming nine knots an hour.
3. Number and capacity of small boats carried by each transport.
4. United States transports carrying troops, their tonnage, and number of officers and men carried by each.
5. Division commanders, and transports upon which their commands are embarked.
6. Troops embarked on transports of original expedition.
7. Organizations, commanders of same, and transports upon which they are embarked.
8. Number of animals, with forage for same, to what organizations they belonged, and upon what transports embarked.
9. Classified list of animals, and names of transports upon which embarked.
10. United States transports, with quartermaster's, commissary, ordnance, and engineer's supplies, and property embarked on them, exclusive of means of transportation, medical supplies in charge of regimental surgeons; clothing, camp and garrison equipage; arms, ammunition and subsistence stores issued to troops, or forage issued to animals embarked.
11. Wagons and ambulances complete, with names of transports upon which embarked.
12. Artillery, and names of transports upon which embarked.
13. Forage loaded upon transports for future supply.
14. Transports of the original fleet returning to Santiago before noon of August 28.
15. Transports arriving in Cuba, not of the original expedition, between June 20 and August 28.
16. Water, ice, and coal supplied to vessels requiring same.
17. Arrival of all transports in Cuba before noon of August 28, showing date of departure from Cuba, how loaded, and destination.

It should be stated that this is a preliminary report, which will be followed as soon as practicable by one more complete in all details pertaining to the operations of the Quartermaster's Department in connection with the Santiago campaign.

In obedience to the order of the Major-General Commanding the Army I reached Tampa, Fla., May 1, 1898, to inspect the quartermaster's department there, and the following day, at the request of Major-General Shafter—owing to his dissatisfaction with the management and the lack of results accomplished—took charge of the quartermaster's department at that point, so far as pertained to the fitting out of the expedition to Cuba, which he had been ordered to organize and command.

On May 2, upon General Shafter's request, I was placed in general charge of the quartermaster's department at Tampa by telegraphic order of the honorable the Secretary of War.

Troops arriving from most of the western posts were fairly well supplied with transportation, while those from the eastern posts had little or none, and the first work was to equalize the transportation among regiments, supply the light batteries, and as additional transportation arrived complete the equipment for all organizations ordered to join the expedition.

Clothing, camp, and garrison equipage, and quartermaster's supplies in general were issued to troops as fast as they arrived, and in the end all were fairly well supplied, though some stores that were needed and ordered by the department arrived late, and in some cases too late for the expedition, owing to the congested if not blockaded condition of the railroad entering Tampa. It was often difficult to get cars most needed to that place, or to get those that arrived there in position for unloading. This in part was owing to there being no card on cars, or other information showing their contents. Bills of lading in but few instances came to hand in time, and invoices not at all. But, all matters considered, I do not see how it was practicable to send them forward at the time shipments were made.

Transports began to arrive at Port Tampa early in May, and as fast as reported were fully coaled, watered, and policed; fires were drawn to prevent the waste of fuel and water, both being very expensive and quite difficult to place aboard, owing to the large number of vessels in harbor and the limited facilities afforded.

The transports were later fitted with bunks or stalls, or both in a few cases, for the comfort of men and animals embarked.

The holds of several of the transports were filled with coal for future use, and the coal so stored was of the greatest value in subsequently coaling many of our vessels, and some arriving from Porto Rico.

Under the order of General Shafter the loading of transports with commissary stores, ammunition, etc., began at once, and was carried on speedily and systematically, but when General Wade assumed command the loading ceased and little or nothing was done in that direction until General Shafter was again in command. Then the loading of transports was resumed and continued, without regard to hours or fatigue, to completion.

The Commanding General of the Army arrived at Tampa June 1, and ordered that the expedition should sail at the earliest day possible. He gave his personal attention on the ground to the loading of the vessels, with the result that the work, if possible, was pushed still more.

The loading of the transports was at best difficult, owing to the limited wharf facilities and not having in hand full cargoes; it being necessary to bring transports into the canal to be loaded, and often before loading was completed send them into the harbor, to be brought back at a future time to complete cargo. Again, commissary stores in cars and trains were not in the form of complete rations, and this often necessitated going from car to car and from a car to some car that had come by another train—perhaps days after or before—to supply complete rations so far as possible for embarkation on any one vessel. To this difficulty should be added the lack of sufficient facilities of the railroad yards and the limited facilities for loading afforded by the pier at Port Tampa, and the additional inconvenience and hindrance caused by trains running between Tampa and the head of the pier and the throngs of people they brought. Regularly cars had to be run back to the yards—1½ or 2 miles distant—to be replaced by other cars, and a little later these were run back to the yard only partially unloaded and replaced by those first brought there, to again be returned to same point.

To cover the whole ground in short, the place affords in all particulars most insufficient facilities for fitting out so many ships and embarking so large a force.

The loading of commissary stores, property, ammunition, arms, accouterments, forage, wagon transportation, etc., was completed at 11 o'clock a. m. June 6.

Word had been sent General Shafter that all would be ready to receive troops by 12 m. of that date, and though the necessary orders were given, the first troops did not arrive—owing to the lack of railroad facilities and the congested condition of the road about Tampa and Port Tampa—until about 2.30 a. m., June 7, subsequent to which time the embarkation was most rapid and continuous (excepting from 10 p. m., June 7, to daylight June 8), and by 9 p. m., June 8, the expedition was embarked and intending to sail on morning of June 9. The expedition was, however, delayed until June 14 by the apparently well-founded report by naval authorities that Spanish war vessels were seen in Nicholas Channel and might be within a few hours' sail of Port Tampa, with a view to the interception and destruction of the expedition.

Nearly all the transports had, as fast as troops had embarked on them, steamed down to the lower bay, ready for an early start the next morning; these were during the night ordered back, and as many as possible placed in the canal (three abreast), and the others placed as near shore as practicable in order that if any attack were made on them the troops could get ashore. It is to be regretted that the report reached the expedition, for it was subsequently ascertained that it was without foundation, and by the delay the expedition lost a week of the best weather for its operations in Cuba; the troops and most of the animals were necessarily kept on board the transports, to their great discomfort and undoubted injury. The weather was exceedingly warm, and the air, in and about the transports crowded into the canal, stifling. With the greatest care exercised in the use of fresh water on the vessels its consumption was large, and it was impossible to replace it, and it was a question of but a short time when some of the vessels would have been without water or the supply on all of them greatly diminished.

The expedition sailed after about a week's delay, as stated; the transports were in good order, but not in as prime condition as when troops and animals were embarked. They were not overcrowded, but it would have been better had there been one or two more vessels, though the Commanding General of the Army gave the expedition three additional vessels which were originally intended for the Porto Rican expedition. The *Florida*, however, one of the original fleet, was so badly damaged by collision June 9, after her return to Port Tampa, that she was necessarily left in port.

About midnight of June 13, upon the urgent request of General Shafter, the Major-General Commanding the Army authorized me to accompany the expedition, and the following day I was assigned to duty as its chief quartermaster.

For general work in debarking troops and lightering the fleet there were two light-draft steamers, one steam lighter, one tugboat, and two large decked-over lighters. One large steam lighter, which had been ordered to join the fleet early in the organization of the expedition, failed to reach it owing to breaking down of machinery, and the necessity for putting into Pensacola for repairs; the tugboat deserted during the first night out, and one lighter was lost off Sand Key, Fla.

The expedition arrived off the coast of Cuba (vicinity of Santiago) June 20, and debarkation began the 22d at Daiquiri, some 17 miles east of Santiago. This place is not a harbor, but rather an indenture, with a fairly good beach on a rocky or precipitous coast. The surf was always high in the afternoon, owing to prevailing trade winds and high winds, and the rapid shoaling along the shore made the sea so rough as to partially or fully prevent the landing of stores, etc. There is here an iron pier, but owing to its great height was of no use to us, except for vessels to lie against and receive water in limited quantities from a pipe found in place for that purpose. There is also a cribbed wharf, some 30 by 40 feet, with piled tramway about 10 by 150 feet connecting it with the shore. In connection

with the wharf was a railroad track and two small push-cars, which were generally used in landing everything but men and animals. While the wharf was not wholly floored, and the boat platform and steps were of little use, except for a single boat, it was of enormous service in facilitating the landing of troops and making the landing of supplies and property easy when compared with landing them through the surf. The place has a small water system, which supplied considerable water for vessels, as also for men. There were a number of buildings, but no use was made of them by the men, and being situated on a plateau some 40 feet of abrupt rise above the landing and somewhat distant, no use was made of them for storage purposes.

The debarkation of infantry and cavalry from transports off this place was quite completed by the night of the 23d. The light artillery and battalion of heavy artillerymen were debarked two or three days later, and troops of General Kent's division, on the *City of Washington*, *Saratoga*, and *Santiago*, at this time lying some miles off the mouth of the harbor of Santiago, were debarked at Siboney by the 27th of the month.

As soon as the debarkation of the troops was well under way, the landing of the pack trains and pack equipage was begun, and continued during the night and following day until all the men, animals, and equipage were ashore. Then the draft mules, harness, teamsters, etc., were landed, followed by the landing of the rations, small-arm ammunition, light-artillery and cavalry horses, harness, horse equipment, artillery carriages, artillery ammunition, and men.

The landing of wagon transportation was now begun and pushed to the limit; but as the wagons were knocked down great difficulty was experienced in sending them forward as fast as the department desired.

The debarkation at this time of the personnel of the expedition, its artillery, transportation, and supplies was most expeditious.

The navy was of valuable service in the landing of troops, and should receive great praise for the assistance rendered at this time, though I am not of the opinion that a landing could not have been made without its aid, as claimed by some naval officers. The navy expedited debarkation by the manning and use of their rowboats and steam launches, and with their trained knowledge of the proper handling of small boats under all circumstances, to say nothing of their work being done by disciplined men—quite at home in the performance of it—their service was most efficient.

Many of the troops, however, debarked themselves, in boats belonging to their ships, during the two days and subsequent to 6 p. m. both days, at which hour the navy hauled off and returned to their ships. I can safely say that the men could, in all cases, have been depended upon to debark themselves, as we had 153 ship's boats, capable of carrying ashore 2,500 men and equipments at one time. Besides the expedition's small boats, it had the steam lighter *Laura*, capable of easily carrying half a regiment at a time, and in which work it was employed during the two days of debarkation. This vessel was by far the most expeditious and comfortable means employed; and, furthermore, had it been necessary, the *Cumberland* and *Manteo*, both light-draft steamers, would have been utilized for this service.

The debarkation of troops was not at all difficult when compared with the work incident to the landing of animals, and especially the landing of war materials and supplies belonging to the expedition, and in all of this work the expedition received no material assistance from the navy, though it has been stated—under oath, I believe—that the only lighter the expedition had in Cuba was borrowed from the navy, while, as a matter of fact, no lighter was obtained from that source.

Inasmuch as considerable has been said by naval officers to the effect that the beach was strewn with the débris of small boats, wrecked by troops landing, or endeavoring to land, themselves, I owe it to these troops to report that at the end of debarkation but five boats had been wrecked, and two of these were boats belonging to and manned by the navy. They were large, fine boats, especially one of them, which was a large row and sail launch, belonging to the *Brooklyn*. Later, at Siboney, a steam launch, belonging to the *New York*, I think, was carried into the breakers and wrecked. So it would appear that the navy, as well as the army, was at times unfortunate in making landings.

It was also stated that the navy turned over to the expedition a lighter which was not cared for by us, and which went ashore and was wrecked. The facts in the case are about as follows: July 3, Lieutenant Winslow, I think, came ashore at Siboney and told someone not in authority in such matters, that he had anchored a lighter near there for the use of the expedition, and then, very properly, hurried off to the engagement going on with the Spanish war vessels. The lighter was not sufficiently well anchored, and drifting into the surf, was carried ashore and wrecked. I was absent from Siboney much of the time from the 1st to the 7th of July, being on duty at the front, or at Daiquiri directing the unloading and forwarding of mortars, siege guns, and ammunition for same. On my return to Siboney, seeing the lighter ashore I made inquiries of the assistant quartermaster there regarding it, and he stated to me that upon its drifting ashore he was told that a naval officer had anchored it there and had informed an officer of the Medical Department that it was for the use of the army. I make no complaint, but desire to present the matter as I understand it.

The landing of the animals was difficult and tedious, owing to the high surf and rough sea. It was not possible to land them at the wharf even if time had permitted. They were, therefore, run overboard, with halters and ropes on, and led ashore by men in small boats. Often the animals would take a different course from the boats, preventing the rowing or steering, and causing confusion and the temporary loss of the animals. In all cases, I believe, where animals got loose from a boat, and often when they had passed through the surf to firm footing, where men were ready to receive them, they would turn back and swim out to sea. The chase was often long and difficult before capture, and in some instances the animals were drowned.

The steam lighter *Laura*, the light-draft steamers *Manteo* and *Cumberland*, and the large decked-over lighter did not meet the requirements of the expedition in means for communicating with vessels, debarking troops, lightering supplies, etc. However, had it not been for the failure of the steam lighter *Bessie* to join as expected, the desertion of the tugboat *Captain Sam*, and the loss of a decked-over lighter, the expedition would have been fairly well supplied in that respect, and more satisfactory and expeditious results would have been accomplished.

As a result of my experience, I would now recommend for an expedition of the same kind, and about the same size, three seagoing tugboats, six steam launches, four steam lighters of the *Bessie* class, and four large decked-over lighters, all first-class—the steam launches (and the tugs if necessary)—for means of communication between ships and land, and between ship and ship; in this, the expedition was well-nigh, if not, properly speaking, wholly deficient.

All artillery, ammunition, land transportation, forage, other supplies generally, and a part of the commissary supplies, were unloaded at Daiquiri. Though this base was some miles farther from the front than Siboney, the facilities for unloading the transports were better in all respects.

Siboney, another base of supplies, some 10 miles from Santiago, has a harbor of about the same natural features as Daiquiri. The place had no wharf, and the engineers therefore constructed a small pier, which afterwards was replaced by a

larger one, constructed by the Thirty-third Michigan Volunteers. At this place the larger part of the commissary supplies were unloaded, and all reinforcements by transports or naval vessels were debarked.

The road leading from Daiquiri to Siboney, and thence to Santiago, was scarcely more than a trail at the time we began using it, though it had been in use by natives for centuries. That part between Siboney and Santiago was particularly bad, as it passed over a range of high ground and through depressions, ravines, water courses, and small rivers. There were no bridges, and the cuts in the hilly portions, and for long distances on nearly level ground, were deep, having apparently been cut down by their long usage, constant erosion, and the effects of heavy rainfall. The road required a great deal of work to make it of any use; being exceedingly narrow, turn-outs had to be made at intervals to provide for passing of teams and pack trains. With the use of the road when wet, it became impassable in many sections, and new road was cut through brush and timber where possible. The time given to the road by the United States engineers, Thirty-third and Thirty-fourth Michigan Infantry, was considerable, and the amount of work done very great, resulting in the material improvement of the old road by corduroying with brush, filling depressions, removing boulders, bridging streams, and cutting through woods, and roughly making new road in part. With all this work done upon it, however, it was at no time in really good order, and a part of the time, as stated, it was all but impassable, thus rendering it most difficult to meet the demands from the front.

To what is already said I may properly add that much of that part of the road ascending the east side of the range of high ground before referred to was so narrow, deeply cut, and with such precipitous sides that from first to last wagons could not pass on it, nor could a mounted man pass a wagon, but it was impossible to widen it or build new road by any other route. Therefore the moving of pack and wagon trains leaving Siboney and the front had to be timed, and with all the care possible temporary blockades occurred, especially when the sick and wounded were being brought to the rear.

Difficulties were also experienced in supplying the troops and animals at the front, owing to the great lack of experienced teamsters, from a few days subsequent to the landing. The pack trains and teams were manned at first by civilians, but they rapidly fell sick, especially the teamsters and wagon masters, and their places had to be filled by soldiers not always skilled in this work. One of the worst instances I will mention, that actual conditions may be more fully understood: Returning from Guantanamo Bay, where I had been ordered July 10 to make an inspection for a large camp, I stopped at Daiquiri at daylight on the following morning to see how matters were progressing there. I found Major Jacobs, quartermaster in charge down sick, as were also his assistants, wagon masters, and teamsters generally. There were but 17 teamsters for duty, 14 of whom were sent to the front for supplies, and 3 placed in charge of so large a number of mules that they could scarcely feed them, much less take care of them properly. I hurried on to Siboney and telegraphed the Major-General Commanding for a large detail of soldiers to drive teams and care for animals, which was at once granted. This is one of the worst cases, though others of exceptional hardship were of almost daily occurrence, requiring greater efforts to meet demands.

As early as the 26th of June orders were received, and subsequently repeated, to unload and send transports north for General Miles's expedition to Porto Rico. This was done with the greatest possible expedition, but it was found to be impracticable in many cases to accomplish the unloading of commissary stores in complete rations, owing to the scattered disposition of supplies in the ships and there being no way of providing for their storage on shore. These conditions continued until the ships were all brought into the harbor of Santiago, where each vessel

when reached was wholly discharged. I was ordered to send all unloaded transports to Guantanamo Bay, to report to Admiral Sampson, who would send a convoy north with them. I soon learned that the vessels did not leave there promptly, and therefore allowed vessels ready to sail to proceed to the States alone.

All transports were taken into Santiago Harbor the 18th of July, and by August 1 fifteen of them had been unloaded and sent north.

August 4 orders were received to ship the expedition north, and this was done with great dispatch, as tabulated statements herewith will show. It should be stated that all these vessels were inspected and reported in good condition for the service required by Dr. Ives, chief surgeon First Division, Fifth Army Corps.

It should be understood that many of the vessels had to be coaled, and still many more watered, and nearly all required ice.

August 8 the transports began to arrive for the Spanish prisoners of war. Though their contract stated that they should furnish themselves with water, in view of our controlling all of the limited supply, such quantity as they required was furnished from this source. The embarking of Spanish prisoners was entirely by small steamers and steam lighters. It was most tedious, owing to the slowness of Spanish officials and the wretched condition of the men.

The work done by the department throughout the campaign (beginning at Tampa) was enormous. There was no rest by day and none often by night, and while much did not run as well and smoothly as would have been done at a later period, the expedition fulfilled its mission exceedingly well.

The tabulated statements show in part what was accomplished, but no statements of the kind, however elaborate, could adequately show the actual work performed.

In closing, would state that I left Santiago for this city on August 28, in obedience to the telegraphic orders of the honorable the Secretary of War, dated August 26. I did not leave Santiago until the last troops for duty of the expedition ordered north had embarked, and all the sick had preceded me, except some 400, which the chief surgeon desired to remain behind.

I asked for no orders until I saw ahead the end of the embarkation of the expedition for the north, and then requested instructions as to whether or not I should proceed to Porto Rico.

It seems appropriate to here call attention to the fact that in the transportation of the expedition not a single accident has occurred resulting in the loss of life, the loss or crippling of a ship, or the serious delay of a vessel.

Respectfully submitted.

C. F. HUMPHREY,
Brigadier-General Volunteers.

EXPEDITION TO SANTIAGO DE CUBA UNDER THE COMMAND OF MAJ. GEN. WILLIAM R. SHAFER, U. S. VOLUNTEERS.

[Lieut. Col. C. F. Humphrey, Deputy Quartermaster-General, U. S. Army, Chief Quartermaster of expedition.]

United States transports, commander, tonnage, draft, water, and coal capacity.

Con- secu- tive No.	Name.	Desig- nating No.	Commander.	Ton- nage.	Draft.	Capacity.	
						Water.	Coal.
					<i>Feet.</i>	<i>Gallons.</i>	<i>Tons.</i>
1	Alamo	6	Hix	2,237	17	20,000	776
2	Allegheny	17	Nickerson	1,433	17	16,700	450
3	Aransas	27	Hopner	679	9	8,000	150
4	Berkshire	9	Dizer	1,433	17	16,000	418
5	Breakwater	29	Rivero	794	14	5,000	150
6	Cherokee	4	Garvin	1,956	12	18,000	770
7	Comal	7	Evans	2,251	16	32,000	630
8	Concho	14	Risk	2,674	17	33,000	1,900
9	Clinton	32	Wertsch	717	10	18,200	260
10	City of Washington	16	Stevens	1,743	22	18,000	1,150
11	Cumberland	31	Minot	88	8	4,000	110
12	D. H. Miller	19	Peters	1,673	17	12,000	460
13	Florida <i>a</i>	15	Minor	1,307	17	15,000	276
14	Gussie	3	Berney	576	10	15,000	190
15	Iroquois	25	Kemble	2,275	15	27,000	1,000
16	Kanawha <i>b</i>	34	Evans	431	14	85,000	125
17	Knickerbocker	13	Betts	1,139	16	7,000	400
18	Laura <i>c</i>	33	Spalding	158	5	500	100
19	Leona	21	Wilder	2,330	13	40,000	1,000
20	Manteo	36	Brown	408	8	5,000	200
21	Matteawan <i>d</i>	26	Lewis	2,499	17	183,000	1,200
22	Miamie	1	McDonald	2,292	18	137,000	1,100
23	Morgan	30	Staples	537	10	18,200	260
24	Olivette <i>f</i>	11	Stevenson	1,104	12	60,000	275
25	Orizaba	24	Downs	2,334	18	45,000	800
26	Rio Grande	22	C. Staples	2,048	16	55,000	900
27	San Marcos	18	Itzen	2,187	17	30,000	815
28	Santiago	2	Leighton	1,694	18	28,000	840
29	Saratoga	20	Johnson	1,940	18	16,000	684
30	Segurança	12	Hanson	2,806	19	15,380	1,200
31	Seneca	5	Decker	1,911	19	16,750	1,200
32	Stevens <i>g</i>	35	Vanaman	227	9	115,000	Sail.
33	Stillwater	28	Galt	510	15	5,000	150
34	Vigilancia	23	McIntosh	2,900	18	24,000	1,100
35	Whitney	10	G. Staples	767	10	18,200	260
36	Yucatan	8	Robertson	2,338	18	30,000	920

a Left at Port Tampa for repairs; cut amidships to water's edge by the *Miami* June 9; vessel fitted with distiller, capacity 2,000 gallons daily.

b Water tender.

c Tender and lighter.

d Fitted with two distillers, capacity 10,000 gallons daily.

e Fitted with two distillers, capacity 11,000 gallons daily.

f Fitted with distiller, capacity 2,000 gallons daily.

g Water tender.

Number of days' coal aboard the transports if steaming 9 knots an hour.

Name.	Days steaming at 9 knots an hour.	Name.	Days steaming at 9 knots an hour.
Alamo	20	Kanawha	10
Allegheny	15	Stevens <i>a</i>	10
Aransas	12	Manteo	30
Berkshire	15	Matteawan	30
Breakwater	10	Miami	30
Cherokee	25	Morgan	10
Comal	10	Olivette	8
Concho	25	Orizaba	25
Clinton	10	Rio Grande	30
City of Washington	20	San Marcos	25
D. H. Miller	15	Santiago	20
Florida	18	Saratoga	14
Gussie	10	Segurança	25
Iroquois	25	Seneca	20
Knickerbocker	15	Stillwater	10
Leona	25	Vigilancia	25
Cumberland	10	Whitney	10
Laura	30	Yucatan	25

a Sailing vessel.

NOTE.—Large amount of coal stored in holds of Alamo, Allegheny, Berkshire, Cherokee, Concho, City of Washington, D. H. Miller, Iroquois, Leona, Matteawan, Miami, Olivette, Orizaba, Rio Grande, San Marcos, Santiago, Segurança, Seneca, Vigilancia, and Yucatan.

Number and capacity of small boats carried by each transport.

Name.	Number of boats.	Men, carrying capacity.	Name.	Number of boats.	Men, carrying capacity.
Alamo	4	80	Morgan	5	75
Allegheny	3	75	Olivette	8	160
Aransas	5	90	Orizaba	6	120
Berkshire	3	75	Rio Grande	5	90
Breakwater	5	75	San Marcos	5	132
Cherokee	6	120	Santiago	4	80
Comal	4	80	Saratoga	5	90
Concho	5	100	Segurança	6	108
Clinton	4	60	Seneca	7	140
City of Washington	4	80	Stillwater	4	50
D. H. Miller	5	100	Vigilancia	6	120
Florida	4	90	Whitney	5	90
Gussie	3	60	Yucatan	6	150
Iroquois	8	160			
Knickerbocker	3	60	Total	153	3,034
Leona	5	84	Steam-lighter Laura		400
Manteo	2	35			
Matteawan	4	125	Grand total		3,434
Miami	4	80			

NOTE.—Steam-lighter Laura may carry 400 men, standing, on her deck.

United States transports carrying troops, their tonnage, and number of officers and men carried by each.

Transport.	Ton-nage.	Offi-cers.	Men.	Transport.	Ton-nage.	Offi-cers.	Men.
Alamo	2,237	33	574	Miami	2,292	55	919
Allegheny	1,493	14	80	Morgan	537	3	69
Aransas	679	2	13	Olivette	1,104	3	35
Berkshire	1,433	14	268	Orizaba	2,334	35	622
Breakwater	794	20	467	Rio Grande	2,048	49	882
Cherokee	1,956	35	852	San Marcos	2,187	38	1,237
Comal	2,251	10	284	Santiago	1,694	51	739
Concho	2,674	53	1,034	Saratoga	1,940	38	635
Clinton	717	2	169	Segurança	2,806	38	477
City of Washington	1,743	33	751	Seneca	1,911	32	656
D. H. Miller	1,673	8	280	Stillwater	510	3	69
Iroquois	2,275	38	722	Vigilancia	2,900	44	954
Knickerbocker	1,139	32	588	Yucatan	2,338	43	773
Leona	2,330	51	910				
Manteo	408	10	265	Total		819	16,058
Matteawan	2,499	32	734				

Division commanders and transports upon which their commands are embarked.

Organizations.	Commander.	Transports.
Fifth Corps headquar-ters.	Maj. Gen. Wm. R. Shafter	Segurança.
First Division	Brig. Gen. J. F. Kent	Santiago, Alamo, Clinton, City of Wash- ington, Miami, Orizaba, San Marcos, Saratoga, Vigilancia, Yucatan.
Second Division	Brig. Gen. H. W. Lawton	Iroquois, Alamo, Cherokee, Concho, D. H. Miller, Knickerbocker, Manteo, Seneca.
Independent Bri-gade.	Brig. Gen. J. C. Bates	Matteawan, Aransas, Breakwater, Mor- gan, Stillwater.
Cavalry Division	Maj. Gen. Joe Wheeler	Allegheny, Leona, Miami, Rio Grande, Yucatan.
Light Artillery	Maj. J. W. Dillenback	Berkshire.
	Capt. G. S. Grimes	Do.
	Capt. C. D. Parkhurst	Do.
	Capt. Allyn Capron	Comal.
	Capt. C. L. Best	Do.
Siege Artillery	Capt. W. Ennis	Orizaba.
	Capt. A. S. Cummins	Do.
Engineer Battalion.	Capt. E. Burr	Alamo.
Balloon Signal de-tachment.	Maj. J. E. Maxfield	Rio Grande.
	Maj. F. Greene	Segurança.

NOTE.—Guns, ammunition, etc., of Light Artillery are on the Comal, Iroquois, and Seneca; siege guns, ammunition, etc., on the Orizaba; Gatling guns and detachment on Cherokee; dynamite gun and detachment of First Volunteer Cavalry on the Yucatan; artillery horses on transports with artillerymen.

Troops embarked on the following-named transports.

Transport.	Designating No.	Troops on board.	Officers.	En-listed men.
Alamo	6	Headquarters band, and companies C, D, E, and G, 10th U. S. Infantry; companies C and E, Engineer Battalion, and headquarters 2d Infantry Brigade, 1st Division.	33	574
Allegheny	17	Headquarters Cavalry Division. Enlisted men caring for horses.	14	80
Aransas	27	Loaded with the transportation, etc., of the 3d U. S. Infantry.	2	13
Berkshire	9	Light Artillery Battalion and light batteries A and F, 2d U. S. Artillery.	14	268
Breakwater	29	3d U. S. Infantry	20	467
Cherokee	4	12th U. S. Infantry and headquarters and 3 companies 17th U. S. Infantry.	35	852
Comal	7	Company I, 7th U. S. Infantry, and light batteries E and K, 1st U. S. Artillery.	10	284
Concho	14	Headquarters 2d Infantry Brigade, 2d Division, 4th U. S. Infantry, and 25th U. S. Infantry.	53	1,034
Clinton	32	Companies D and B, 2d U. S. Infantry	2	169
City of Washington	16	24th U. S. Infantry and 1 battalion 21st U. S. Infantry.	33	751
D. H. Miller	19	Companies E, G, and H, 7th U. S. Infantry	8	280
Iroquois	25	Headquarters and companies A, B, C, D, and F, 7th U. S. Infantry; companies C, G, H, and K, 17th U. S. Infantry; headquarters 2d Infantry Division, and headquarters 3d Infantry Brigade, 2d Division.	38	722
Knickerbocker	13	Headquarters and 8 companies of 2d Massachusetts Infantry.	32	588
Leona	21	8 troops 1st U. S. Cavalry, 8 troops 10th U. S. Cavalry, and headquarters 2d Cavalry Brigade, Cavalry Division.	51	910
Manteo	36	2 companies 17th U. S. Infantry and 2 companies 2d Massachusetts Infantry.	10	265
Matteawan	26	20th U. S. Infantry, Troops F and D, 2d U. S. Cavalry, and headquarters Independent Infantry Brigade.	32	734
Miami	1	6th U. S. Infantry and 8 troops 9th U. S. Cavalry	55	919
Morgan	30	Major Rafferty and Troop C, 2d U. S. Cavalry	3	69
Olivette	11	Hospital ship	3	35
Orizaba	24	22d U. S. Infantry and batteries G and H, 4th Artillery (Siege Artillery Battalion).	35	622
Rio Grande	22	8 troops of 3d U. S. Cavalry and 8 troops 6th U. S. Cavalry; Balloon Signal detachment, and headquarters 1st Cavalry Brigade, Cavalry Division.	49	882
San Marcos	18	Companies A, E, F, and H, 2d U. S. Infantry; 16th U. S. Infantry, and headquarters 1st Infantry Brigade, 1st Division.	38	1,237
Santiago	2	9th U. S. Infantry; 1 battalion 10th U. S. Infantry, and headquarters 1st Infantry Division.	51	739
Saratoga	20	13th U. S. Infantry, headquarters' band, and companies C, D, E, and H, 21st U. S. Infantry, and headquarters 3d Infantry Brigade, 1st Division.	38	635
Segurança	12	1st U. S. Infantry, Balloon Signal detachment	17	477
Seneca	5	Headquarters 5th Army Corps, staff. Officers accompanying the expedition	16 5	-----
Stillwater	28	8th U. S. Infantry, 2 companies 2d Massachusetts Infantry, and headquarters 1st Infantry Brigade, 2d Division.	32	656
Vigilancia	23	Troop A, 2d U. S. Cavalry	3	69
Yucatan	8	71st New York Infantry	44	954
		Headquarters, band and companies C, D, G, and B, 2d U. S. Infantry, and 8 troops 1st Volunteer Cavalry (Rough Riders).	43	773
Total			819	16,058
Cumberland	31	Stevadores		
Gussie	3	Teamsters and packers		
Kanawha	34	Water tender		
Laura	33	Steam tender		
Stevens	35	Water tender		
Whitney	10	Teamsters		

NOTE.—First, Third, Sixth, Ninth, and Tenth United States Cavalry dismounted. First Volunteer Cavalry dismounted. Troops A, C, F, and D, Second United States Cavalry mounted.

United States troops and transports upon which embarked.

Organizations.	Commanding officer.	On what ships.
1st Infantry	Lieut. Col. W. H. Bisbee	Segurança (12), regiment.
2d Infantry	Lieut. Col. W. M. Wherry	Yucatan (8), hdqrs. band, Companies C, G, D, and B; Clinton (32), Companies D and B; San Marcos (18), Companies A, E, F, and H.
3d Infantry	Col. John H. Page	Breakwater (29), regiment.
4th Infantry	Lieut. Col. A. H. Bainbridge	Concho (14), regiment.
6th Infantry	Lieut. Col. H. C. Egbert	Miami (1), regiment.
7th Infantry	Col. D. W. Benham	Iroquois (25), hdqrs. Companies A, B, C, D, and F; D. H. Miller (19), Companies E, G, and H; Comal (7), Company I.
8th Infantry	Maj. C. H. Conrad	Seneca (5), regiment.
9th Infantry	Lieut. Col. E. P. Ewers	Santiago (2), regiment.
10th Infantry	Lieut. Col. E. R. Kellogg	Alamo (6), hdqrs. band, Companies C, D, E, and G; Santiago (2), 1 battalion.
12th Infantry	Lieut. Col. R. Comba	Cherokee (4), regiment.
13th Infantry	Maj. P. H. Ellis	Saratoga (20), regiment.
16th Infantry	Col. H. A. Theaker	San Marcos (18), regiment.
17th Infantry	Lieut. Col. J. T. Haskell	Cherokee (4), hdqrs. and 3 companies; Iroquois (25), Companies C, G, H, and K; Manteo (36), 2 companies.
20th Infantry	Maj. William S. McCaskey	Matteawan (26), regiment.
21st Infantry	Lieut. Col. Chambers McKibben	Saratoga (20), hdqrs. band, Companies C, D, E, and H; City of Washington (16), 1 battalion.
22d Infantry	Lieut. Col. J. H. Patterson	Orizaba (24), regiment.
24th Infantry	Lieut. Col. E. H. Liscum	City of Washington (16), regiment.
25th Infantry	Lieut. Col. A. S. Daggett	Concho (14) regiment.
2d Massachusetts Volunteers	Col. E. P. Clark	Knickerbocker (13), hdqrs. and 8 companies; Seneca (5), 2 companies; Manteo (36), 2 companies.
71st New York Volunteers	Lieut. Col. W. A. Downs	Vigilancia (23), regiment.
1st Cavalry	Lieut. Col. C. D. Viele	Leona (21), regiment.
2d Cavalry	Maj. W. A. Rafferty	Morgan (30), Major Rafferty and Troop C; Matteawan (26), Troops F and D; Stillwater (28), Troop A.
3d Cavalry	Maj. H. W. Wessels	Rio Grande (22), regiment.
6th Cavalry	Lieut. Col. Henry Carroll	Rio Grande (22), regiment.
9th Cavalry	Lieut. Col. J. M. Hamilton	Miami (1), regiment.
10th Cavalry	Col. T. A. Baldwin	Leona (21), regiment.
1st Volunteer Cavalry	Col. Leonard Wood	Yucatan (8), regiment.
Engineer Battalion	Capt. E. Burr	Alamo (6), Company C, Capt. G. D. Fitch, commanding; Company E, First Lieut. E. E. Winslow, commanding.
Light Artillery Battalion	Maj. J. W. Dillenback	Berkshire (9).
.....	Capt. Allyn Capron	Comal (7), Light Battery K, 1st Artillery.
.....	Capt. C. L. Best	Comal (7), Light Battery E, 1st Artillery.
.....	Capt. G. S. Grimes	Berkshire (9), Light Battery A, 2d Artillery.
.....	Capt. C. D. Parkhurst	Berkshire (9), Light Battery F, 2d Artillery.
Siege Artillery Battalion	Capt. W. Ennis	Orizaba (24), Battery G, 4th Artillery.
Balloon Signal detachment	Capt. A. S. Cummins	Orizaba (24), Battery H, 4th Artillery.
.....	Maj. J. E. Maxfield	Rio Grande (22).
.....	Maj. F. Greene	Segurança (12).
5th Army Corps	Maj. Gen. Wm. R. Shafter and staff	Do.
1st Division	Brig. Gen. J. F. Kent and staff	Santiago (2).
1st Brigade	Brig. Gen. H. S. Hawkins and staff	San Marcos (18).
2d Brigade	Col. E. P. Pearson, 10th Infantry, and staff	Alamo (6).
3d Brigade	Col. C. A. Wikoff, 22d Infantry, and staff	Saratoga (20).
2d Division	Brig. Gen. H. W. Lawton and staff	Iroquois (25).
1st Brigade	Col. J. J. Van Horn, 8th Infantry, and staff	Seneca (5).
2d Brigade	Col. Evan Miles, 1st Infantry, and staff	Concho (14).
3d Brigade	Brig. Gen. A. R. Chaffee and staff	Iroquois (23).
Cavalry Division	Maj. Gen. Joe Wheeler and staff	Allegheny (17).

United States troops and transports upon which embarked—Continued.

Organizations.	Commanding officer.	On what ships.
5th Army Corps—Continued.		
Cavalry Division—Continued.		
1st Brigade	Brig. Gen. S. S. Sumner and staff.	Rio Grande (22).
2d Brigade	Brig. Gen. S. M. B. Young and staff.	Leona (21).
Independent Brigade.	Brig. Gen. J. C. Bates and staff.	Matteawan (26).

NOTE.—Thirty civilian clerks aboard Segurança, Olivette, Allegheny, Matteawan, and Alamo; 15 military attachés, 11 quartered on the Segurança and 4 on the Olivette; 55 civilians connected with daily papers and magazines, quartered on the Vigilancia and Olivette; 1 naval cadet and at least 1 man of the Signal Corps on each transport; 272 teamsters and packers aboard the Clinton, D. H. Miller, Gussie, Whitney, Matteawan, Stillwater, Morgan, and Aransas; 5 boss stevedores and 102 stevedores aboard the Cumberland; 54 civilian hostlers and attendants aboard the Alamo, Allegheny, Comal, Clinton, D. H. Miller, Olivette, and Segurança. First, Third, Sixth, Ninth, and Tenth United States regiments of cavalry and First Volunteer Cavalry (Rough Riders) dismounted; Troops A, C, D, and F, Second United States Cavalry, mounted.

United States transports, forage for animals, and number embarked, and to what organizations they belong if not private property.

Name.	Forage.	Mules.	Government horses.	Private horses.
Alamo	Forage for 4 horses for 10 days			4
Allegheny	Forage for 190 horses for 10 days			151
Aransas	Forage loaded in New Orleans; more than 10 days' supply.	114		8
Berkshire	Horses, batteries A and F 2d Artillery; forage for 175 horses for 10 days.		153	
Comal	2d Cavalry Brigade	12		24
	2d Brigade			12
	Battery E, 1st Artillery		75	
	Battery K, 1st Artillery		75	
	8th Infantry			12
	Hospital Corps; forage for 230 horses for 10 days.		3	
Clinton				17
	Pack train No. 16	65	1	
	Draft mules; forage loaded in New Orleans; more than 10 days' supply.	54	4	
D. H. Miller	Draft mules; forage for 325 mules for 10 days.	241		2
Gussie	Pack train No. 1	66	1	
	Pack train No. 8	64	1	
	Pack train No. 13	64	1	
	Pack train No. 9	64	1	
	Pack train No. 3; forage for 350 mules for 10 days.	67	2	
Matteawan	Troops F and D, 2d U. S. Cavalry; forage loaded in New Orleans; more than 10 days' supply.	166	106	48
Morgan	Troop C, 2d U. S. Cavalry; forage loaded in New Orleans; more than 10 days' supply; 60 sacks oats added at Port Tampa.	61	74	
Olivette	Headquarters, forage for 13 horses for 10 days.			13
Orizaba				64
Segurança	Headquarters; forage for 30 horses for 10 days.			26
Stillwater	Troop A, 2d U. S. Cavalry; forage loaded in New Orleans; more than 10 days' supply.	4	76	
Whitney		294	5	
Total		1,336	578	381
				578
				1,336
Grand total (animals).				2,295

NOTE.—All cavalry dismounted except troops A, C, D, and F, 2d United States Cavalry.

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Classified list of animals and names of transports upon which embarked.

Transport.	Pack mules.	Bell mares.	Draft mules.	Government horses.	Private horses.
Alamo					4
Allegheny					151
Aransas			114		8
Berkshire				153	
Comal			12	153	48
Clinton	65	1	54	4	17
D. H. Miller			241		2
Gussie	325	6			
Matteawan			106	106	48
Morgan			61	74	
Olivette					13
Orizaba					64
Seguranga					26
Stillwater			4	76	
Whitney			294	5	
Total	390	7	946	571	381

NOTE.—Pack and saddle mules, fully equipped; 114 complete sets of 6-mule harness, 114 army wagons, 84 complete sets of 4-mule ambulance harness, 81 escort wagons, 7 Red Cross ambulances.

United States transports with quartermaster, commissary, ordnance, and engineers' supplies, and property embarked on them.

[List does not include means of transportation, medical supplies in charge of regimental surgeons, clothing, camp, and garrison equipage, arms, ammunition, and subsistence stores issued to troops, or forage issued to animals embarked.]

STEAM TRANSPORT ALAMO, NO. 6.

Engineers' supplies: 1 carload rollers.

Field equipment: 10 boxes ponchos (1,200 blankets); 38 boxes ponchos (3,800 blankets); 60 canvas tarpaulins—full size.

Ordnance: 214,000 rounds cartridges, caliber .45; 1,080 Springfield rifles; 1,530 McKeever cartridge boxes; 2,671 waist belts; 2,647 waist-belt plates.

NOTE.—Balance of cargo of this ship was loaded in New York and consists of pontoons, bridge material, tools, sand bags, and other stores and supplies pertaining to engineer operations. It is in the custody of the engineer battalion embarked on board the vessel.

STEAM TRANSPORT ALLEGHENY, NO. 17.

Forward hold:

Commissary—

503 cases roast beef	pounds..	37,725
216 cases tomatoes	do.....	16,200
111 cases baking powder	do.....	2,442
152 cases bacon	do.....	35,895
7 cases pepper	do.....	1,353

Forage:

48 bales hay	do.....	5,280
121 bales hay	do.....	13,310
91 sacks oats	do.....	11,375
38 sacks oats	do.....	4,750

After hold:

Commissary: 961 cases beef

Forage—

91 sacks oats	do.....	11,375
121 bales hay	do.....	13,310

Ordnance:

Cartridges, caliber .45	rounds..	342,000
Springfield rifles		700
McKeever cartridge boxes		1,559
Waist belts		2,300
Waist-belt plates		2,850

STEAM TRANSPORT BERKSHIRE, NO. 9.

Forward hold:

Commissary—

2,087 cases hard bread.....	pounds..	104,350
120 sacks salt.....	do.....	23,360
227 cases coffee.....	do.....	19,855
5 cases pepper.....	do.....	964
2,061 cases roast beef.....	do.....	103,050
138 sacks flour.....	do.....	13,800
164 sacks sugar.....	do.....	16,400
231 cases candles.....	do.....	9,240
150 sacks beans.....	do.....	15,000
263 cases bacon.....	do.....	57,053
100 sacks rice.....	do.....	10,000
148 cases baking powder.....	do.....	3,256
2,503 cases tomatoes.....	do.....	187,725

Forage—

84 sacks oats.....	do.....	10,500
31 bales hay.....	do.....	3,875

After hold:

Commissary—

40 barrels vinegar.....	do.....	18,623
511 cases beef.....	do.....	25,550
612 sacks flour.....	do.....	61,200
136 sacks sugar.....	do.....	13,600
2,071 cases hard bread.....	do.....	79,500
1,742 cases tomatoes.....	do.....	130,650

Forage—

120 sacks oats.....	do.....	15,000
61 bales hay.....	do.....	6,635

Ordnance—

Cartridges, caliber .45.....	rounds..	98,000
Springfield rifles.....		220
McKeever cartridge boxes.....		660
Waist belts.....		1,140

STEAM TRANSPORT CHEROKEE, NO. 4.

Ordnance:

Cartridges, caliber .45.....	rounds..	1,068,000
Cartridges, caliber .30.....	do.....	565,000
Cartridges, caliber .38 (revolver).....	do.....	118,000

STEAM TRANSPORT COMAL, NO. 7.

Forward hold:

Commissary—

135 cases baking powder.....	pounds..	2,970
92 cases coffee.....	do.....	11,500
6 cases pepper.....	do.....	600
3,383 cases bread.....	do.....	169,150
93 cases candles.....	do.....	3,720
125 sacks rice.....	do.....	12,500
965 sacks flour.....	do.....	93,500
274 boxes soap.....	do.....	18,632
42 cases bacon.....	do.....	9,483
2,876 cases tomatoes.....	do.....	215,700

Forage—

240 sacks oats.....	do.....	30,000
319 bales hay.....	do.....	40,490
48 sacks corn.....	do.....	5,280

Ordnance: Ammunition for dynamite gun.....

packages.. 34

Amidships:

Commissary—

35 boxes soap.....	pounds..	2,275
186 sacks beans.....	do.....	18,600
10 boxes candles.....	do.....	450
250 boxes tomatoes.....	do.....	12,500
336 sacks sugar.....	do.....	33,600

3680 INVESTIGATION OF CONDUCT ON WAR WITH SPAIN.

After hold:

Commissary—

762 cases bread	pounds	38,100
50 sacks salt	do	10,000
588 cases bacon	do	139,600
51 cases baking powder	do	1,122
50 barrels vinegar (2,500 gallons)	do	25,000
266 cases bacon	do	60,053
150 sacks beans	do	15,000

Ordnance—

Cartridges, caliber .45	rounds	112,000
Springfield rifles		40
McKeever cartridge boxes		1,808
Waist-belt plates		1,168
Hotchkiss revolving cannon, complete		1
Ammunition for Hotchkiss revolving cannon	rounds	600
Cartridges, caliber .43	do	267,000
Cartridges, caliber .45 (carbine)	do	38,500
Springfield carbines		250
Gun slings		267
Carbine slings	box	1

STEAM TRANSPORT CONCHO, NO. 14.

Forward hold:

Commissary—

1,490 cases bread	pounds	37,250
13 chests (Colonel Weston)	do	2,761

After hold:

Commissary—

866 cases beef	do	43,300
861 cases tomatoes	do	73,375
115 cases bacon	do	28,450
4,122 cases bread	do	113,925
300 cases coffee	do	30,000
35 barrels vinegar	do	16,285
400 sacks flour	do	40,000
101 crates onions	do	5,050

STEAM TRANSPORT CLINTON, NO. 32.

Forage:

Oats	pounds	132,000
Hay	do	52,765

STEAM TRANSPORT CUMBERLAND, NO. 31.

Commissary:

1 case coffee	pounds	100
1 barrel vinegar	do	200
7 sacks potatoes	do	630
9 barrels potatoes	do	1,710
63 cases hard bread	do	2,205
5 boxes bacon	do	1,189

Quartermaster:

18½ cases tents (6 to a case, 111)	do	12,765
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STEAM TRANSPORT D. H. MILLER, NO. 19.

Forward hold:

Forage—

234 sacks oats	pounds	29,250
392 bales hay	do	43,120

After hold:

Ordnance—

Springfield rifles		3,000
McKeever boxes (cartridge)		1,313
Waist belts		1,178
Waist-belt plates		1,160
Gun slings		1,463

STEAM TRANSPORT IROQUOIS, NO. 25.

Forward hold:

Commissary (officers' stores)—

50 cases coffee	pounds..	8,084
200 cases jelly	do.....	5,000
100 sacks sugar	do.....	10,000
94 cases pease	do.....	3,760
20 cases rolled oats	do.....	1,880
370 cases tobacco	do.....	13,100
55 barrels ginger ale	do.....	8,250
100 cases bacon	do.....	3,200
10 cases matches	do.....	250
1 case toothbrushes, etc.....	do.....	119
50 cases deviled ham	do.....	7,500
12 barrels ham	do.....	3,106
1 case pipes	do.....	50
140 cases soup (turtle)	do.....	7,000
40 cases prunes	do.....	1,000
50 cases milk	do.....	2,500
25 cases mustard	do.....	1,250
2 bales towels	do.....	817
34 cases lard	do.....	2,040
8 cases tea	do.....	320
22 cases toilet paper	do.....	2,332
13 cases soap	do.....	650
75 cases peaches	do.....	3,750
17 cases biscuits	do.....	850
394 cases lime juice	do.....	19,500

STEAM TRANSPORT KNICKERBOCKER, NO. 13.

Forward hold:

Commissary—

126 cases bread	pounds..	6,300
208 cases beans	do.....	10,400
590 cases tomatoes	do.....	14,250
147 crates tobacco	do.....	20,580
79 crates tobacco (smoking)	do.....	2,255
377 barrels potatoes	do.....	65,975
153 cases bread	do.....	7,650
155 cases bread	do.....	7,750

After hold:

Commissary—

100 cases tomatoes	do.....	10,000
162 cases coffee	do.....	8,100
62 cases beans	do.....	3,100
150 sacks sugar	do.....	15,000

Ordnance—

Ordnance from Tampa for Lieutenant Brooke, A. O. O	cases..	32
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STEAM TRANSPORT LEONA, NO. 21.

Forward hold:

Commissary—

154 sacks coffee	pounds..	27,200
75 barrels potatoes	do.....	13,500
20 barrels vinegar	do.....	9,360
38 cases candles	do.....	1,520
1,000 cases bread	do.....	50,000
15 barrels salt	do.....	4,500
223 cases baking powder	do.....	4,906
1,085 sacks flour	do.....	108,500
686 cases beef	do.....	34,300
146 sacks sugar	do.....	14,600
124 cases bacon	do.....	28,750
607 cases tomatoes	do.....	42,490
3 cases pepper	do.....	570

3682 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

After hold:

Commissary—

1,978 cases tomatoes	pounds..	147,350
171 barrels potatoes	do....	30,780
2 barrels salt	do....	560
404 sacks sugar	do....	40,400
8 cases pepper	do....	1,738
125 cases bacon	do....	31,250

Forage—

8 bales hay	do....	1,705
12 sacks oats	do....	1,500

Ordnance—

Cartridges, caliber .45	rounds..	92,000
Cartridges, caliber .30	do....	569,000

STEAM TRANSPORT MANTEO, NO. 36.

Forage:

Oats	pounds..	107,360
Hay	do....	120,630

STEAM TRANSPORT MIAMI, NO. 1.

Forward hold:

Forage—

Oats	pounds..	388,000
Hay	do....	284,730

After hold:

Forage—

Oats	do....	120,500
Hay	do....	371,400

STEAM TRANSPORT ORIZABA, NO. 24.

Forward hold:

Forage—

100 sacks oats	pounds..	12,500
264 bales hay	do....	29,475

NOTE.—This ship contains siege battery, ammunition, etc., for same.

STEAM TRANSPORT RIO GRANDE, NO. 22.

Forward hold:

Forage: Hay	pounds..	108,600
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After hold:

For balloon: 46 carboys vitriol (balloon and materials, etc., for Signal Corps)	pounds..	7,980
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Ordnance: Cartridges, caliber .30	rounds..	547,000
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STEAM TRANSPORT SAN MARCOS, NO. 18.

Forward hold:

Commissary—

1,277 cases bacon	pounds..	282,212
401 cases coffee	do....	20,050
371 cases baking powder	do....	8,162
188 cases candles	do....	7,520
13 cases pepper	do....	2,275
2,843 cases tomatoes	do....	204,210
2,686 cases hard bread	do....	134,300
1,230 cases roast beef	do....	61,500

Forage—

33 bales hay	do....	4,125
24 sacks oats	do....	3,000

After hold:

Commissary—

988 cases roast beef	do....	49,400
208 cases tomatoes	do....	20,176
24 sacks beans	do....	2,400
200 cases coffee	do....	20,000
324 sacks salt	do....	28,046
15 sacks rice	do....	1,500
2,294 sacks flour	do....	229,400
104 barrels vinegar (5,798 gallons)	do....	49,444

STEAM TRANSPORT SANTIAGO, NO. 2.

Engineers' supplies: Sand bags		120,000
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STEAM TRANSPORT SARATOGA, NO. 20.

Forward hold:

Commissary—

180 cases bacon	pounds..	38,510
150 sacks sugar	do.....	15,000
185 barrels flour	do.....	37,000
15 barrels salt	do.....	4,500
41½ barrels flour	do.....	4,100
160 cases coffee	do.....	8,000
84 cases baking powder	do.....	1,848
603 cases tomatoes	do.....	45,225
445 cases beef	do.....	22,250
2,000 cases bread	do.....	50,000

After hold:

Commissary—

83 cases bread	do.....	4,150
15 barrels vinegar	do.....	7,022
445 cases beef	do.....	22,250

Ordnance—

Cartridges, caliber .30	rounds..	498,000
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STEAM TRANSPORT SEGURANÇA, NO. 12.

Forward hold:

Commissary—

815 sacks flour	pounds..	81,500
750 cases bacon	do.....	168,750
751 sacks sugar	do.....	19,025

Forage—

38 bales hay	do.....	4,180
29 sacks oats	do.....	3,625

After hold:

Commissary—

620 cases tomatoes	do.....	46,500
1,244 sacks flour	do.....	124,400
504 cases beef	do.....	25,200

STEAM TRANSPORT SENECA, NO. 5.

Forward hold:

Commissary—

152 cases bacon	pounds..	35,628
2,108 cases hard bread	do.....	105,400
515 cases baking powder	do.....	11,330
10 sacks salt	do.....	2,000

After hold:

Commissary—

3,303 cases hard bread	do.....	149,025
1,200 cases roast beef	do.....	52,500
360 cases soap	do.....	21,600
75 cases candles	do.....	3,375
36 cases bacon	do.....	8,100
486 cases sugar	do.....	48,600
181 barrels flour	do.....	36,200

STEAM TRANSPORT VIGILANCIA, NO. 23.

Forward hold:

Forage—

Oats	pounds..	119,875
Hay	do.....	139,785

After hold:

Forage: Oats	do.....	220,215
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STEAM TRANSPORT WHITNEY, NO. 10.

Forage:

170 sacks corn	pounds..	18,700
118 sacks oats	do.....	14,750
501 bales hay	do.....	60,610

3684 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

STEAM TRANSPORT YUCATAN, NO. 8.

Forward hold:

Forage: 1,367 bales hay pounds.. 170,325

After hold:

Forage: 560 sacks oats do.... 71,125

Engineers' supplies: Sand bags..... 100,000

NOTE.—The following-named transports from Mobile, carrying General Bates's brigade, have on board sixty days' rations for officers and men: Aransas, Breakwater, Matteawan, Morgan, Stillwater.

2. The Olivette having been designated as a hospital ship, she was not loaded with forage, ammunition, etc.

3. The City of Washington carried no stores, except ten days' supply for the troops embarked on her; this owing to her deep draft and consequent inability to reach Port Tampa.

4. All vessels not appearing in the foregoing list are accounted for elsewhere in the report.

Wagons and ambulances complete, and transports upon which embarked.

Transport.	Class.	Number.	Total.
Aransas.....	Army wagons.....	6	26
	Escort wagons.....	19	
	Ambulances.....	1	
Cherokee.....	Six-mule wagons.....		104
Iroquois.....	do.....	10	
	Ambulances.....	4	14
Matteawan.....	Six-mule wagons.....	44	
	Ambulances.....	1	45
Morgan.....	Army wagons.....		
Stillwater.....	do.....	4	8
	Ambulances.....	1	
			5
Grand total.....			202

Artillery, and transports upon which embarked.

Name.	Artillery.
Comal.....	1 light battery—guns, caissons, ammunition, etc., and 1 Hotchkiss gun.
Iroquois.....	2 light batteries—guns, caissons, ammunition, etc.
Seneca.....	1 light battery—guns, caissons, ammunition, etc.
Orizaba.....	Siege guns, siege howitzers—ammunition and material for same.
Cherokee.....	2 Gatling guns and detachment.
Yucatan.....	1 dynamite gun and detachment of First Volunteer Cavalry.

Forage aboard United States transports for future supply.

Transport.	Oats.	Hay.	Transport.	Oats.	Hay.
	Pounds.	Pounds.		Pounds.	Pounds.
Allegheny.....	27,500	31,900	Orizaba.....	12,500	29,475
Aransas.....	102,000	90,000	Rio Grande.....		108,600
Berkshire.....	25,500	10,510	San Marcos.....	3,000	4,125
Comal.....	30,000	40,490	Seguranca.....	3,625	4,180
Clinton.....	132,000	52,765	Stillwater.....	24,600	35,000
D. H. Miller.....	29,250	43,120	Vigilancia.....	349,090	139,785
Leona.....	1,500	1,705	Whitney.....	81,930	145,450
Manteo.....	107,360	120,630	Yucatan.....	71,125	170,325
Matteawan.....	378,000	445,000	Total.....	1,961,980	2,292,690
Miami.....	508,500	656,130			
Morgan.....	74,500	163,500			

Sixty days' forage for all animals:

Oats pounds.. 1,365,840

Hay do.... 1,874,040

U. S. TRANSPORT SEGURANCA,

Off Cape Maisi, Cuba, June 19, 1898.

The foregoing report respectfully submitted to the adjutant-general Fifth Army Corps.

C. F. HUMPHREY,

*Lieutenant-Colonel, Quartermaster's Department,
Chief Quartermaster of the Expedition.*

Transports of the original fleet returning to Santiago before noon of August 28.

Name.	Date.	From—	Passengers or cargo.
Allegheny	Aug. 22	Port Tampa	Light.
Breakwater	Aug. 11	New York	Medical stores, camp and garrison equipage, and ice machines.
Clinton	Aug. 15	Port Tampa	Contract physicians and commissary stores.
City of Washington..	Aug. 24	Porto Rico	Commissary stores.
D. H. Miller	Aug. 14	do	350 civilian employees.
Gussie	July 24	Port Tampa	Mules and forage.
Iroquois	July 20	do	Commissary stores, camp and garrison equipage.
Knickerbocker	Aug. 28	do	Part of 5th U. S. Infantry.
Leona	Aug. 14	Savannah	Part of Colonel Sergeant's regiment of immunes.
Olivette	Aug. 2	New York	Medical stores and hospital outfit.
Rio Grande	Aug. 12	Savannah	Part of Colonel Sergeant's regiment of immunes.
Santiago	Aug. 17	Port Tampa	Civilian employees, 5 doctors, quartermaster stores, and 112,950 pounds of forage.
Saratoga	Aug. 25	do	Part of 5th U. S. Infantry, commissary stores, and lumber.
Seneca	Aug. 11	Porto Rico	Light.
Yucatan	Aug. 17	Port Tampa	Nurses and surgeons.

Transports arriving in Cuba not of the original expedition.

Name.	Date of arrival.	Where.	Cargo, where unloaded.
Louisiana	June 30	Siboney	Recruits, pack trains, 10 ambulances, and commissary stores. Recruits debarked at Siboney; cargo at Daiquiri. Ordered to New York with civilian employees, sick and discharged soldiers Aug. 1. (See list showing arrival and departure of transports.)
Relief	July 8	do	Hospital ship.
Rita	July 9	do	Not unloaded; sent to Porto Rico.
Specialist	do	do	Horses and 81 men of 4th and 5th U. S. Artillery and forage. Light artillery debarked at Daiquiri; reembarked and sent to Porto Rico.
	Aug. 2	Santiago	Light, from Porto Rico. Used in sending troops from Santiago to Guantanamo Bay for transportation north by naval vessels. Returned to Montauk Point Aug. 23. (See list showing arrival and departure of transports.)
Unionist	July 9	Siboney	Horses and 122 men of 4th and 5th U. S. Artillery, recruits, and forage. Light artillery debarked at Daiquiri; reembarked and sent to Porto Rico.
	Aug. 21	Santiago	Light, from Porto Rico. Loaded with horses and attendants and ordered to Montauk Point Aug. 26. (See list showing arrival and departure of transports.)
Comanche	July 9	Siboney	Horses, 688 men of Signal Corps and 4th and 5th U. S. Artillery, and commissary stores. Unloaded, except commissary stores, at Daiquiri; received portable shields from Gate City and sent to Porto Rico.
	Aug. 12	Santiago	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 13. (See list showing arrival and departure of transports.)
City of Macon	July 9	Siboney	Part of 1st Illinois Volunteer Infantry and stores. Troops unloaded at Siboney; stores sent to Porto Rico.

Transports arriving in Cuba not of the original expedition—Continued.

Name.	Date of arrival.	Where.	Cargo, where unloaded.
City of Macon.....	Aug. 11	Santiago.....	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 14. (See list showing arrival and departure of transports.)
Gate City.....	July 9	Siboney.....	Part of 1st Illinois Volunteer Infantry, portable shields, and commissary stores. Portable shields transferred to Comanche at Daiquiri. Commissary stores unloaded at Santiago. Loaded with troops and ordered to Montauk Point Aug. 7. (See list showing arrival and departure of transports.)
Hudson.....	do.....	do.....	955 recruits and commissary stores. Unloaded at Siboney, and left Santiago July 20 with sick and wounded for Fort Monroe.
	Aug. 18	Santiago.....	Light. Loaded with troops and ordered to Montauk Point Aug. 19. (See list showing arrival and departure of transports.)
Catania.....	July 10	Siboney.....	1st District of Columbia Volunteer Infantry and commissary stores. Troops debarked at Siboney; commissary stores unloaded at Santiago. Loaded with convalescents, and 1 company of infantry as guard, and ordered to Montauk Point Aug. 17. (See list showing arrival and departure of transports.)
Underwriter.....	July 16	do.....	Steam tugboat. Used at Siboney and Santiago for towing and lightering purposes. Left at Santiago when Colonel Humphrey was ordered north.
Nueces.....	July 19	Mouth of Santiago Harbor.	Siege train and material, and part of army headquarters wagon and pack trains. Not unloaded in Cuba; sent to Porto Rico.
	Aug. 20	Santiago.....	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 20. (See list showing arrival and departure of transports.)
Lampasas.....	July 19	do.....	Company H, 1st District of Columbia Engineers; Company I, 1st Illinois Engineers; pontoons, engineers' materials, and tools, in charge of Col. W. M. Black, U. S. V.; Red Cross nurses, civilian employees, and part of army headquarters wagon and pack trains. Not debarked; sent to Porto Rico.
Mississippi.....	July 20	do.....	Civilian employees, mules, commissary stores, and about 400,000 pounds refrigerator beef. Employees debarked; refrigerator beef unloaded daily as required for issue to troops. Ordered to Porto Rico with mules and commissary stores July 30.
Panama.....	July 22	do.....	D. Van Aken Co., contracting expedition, with docks and miscellaneous building materials, mechanics, and stevedores. Detained until July 24, waiting for steam tug and lighters, reported en route to Porto Rico from New York. Ordered to Porto Rico, July 24, with directions to delay a reasonable length of time off Cape Maisi to intercept said lighters and tow them direct to Porto Rico.
Bessie.....	July 24	do.....	Steam lighter. Used for lightering purposes in Santiago Harbor. Left at Santiago when Colonel Humphrey was ordered north.
Port Victor.....	July 27	do.....	About 360,000 pounds refrigerator beef, mules, and 650 tons of property for Red Cross Society, 200 tons quartermaster stores, and a Swift refrigerator plant to be set up on shore. Mules unloaded at once. Red Cross stores could not be unloaded until the ice schooner Chas. B. Baulch was unloaded and dried out. Quartermaster stores could not, therefore, be unloaded; nor could the refrigerator plant, the latter lying in the bottom of the ship. The refrigerator beef was unloaded daily at the rate required for issue to troops. Unloading did not commence at once, because the cargo of refrigerator beef on the Mississippi had not been issued upon the arrival of the Port Victor, nor for some days after. Vessel left at Santiago when Colonel Humphrey was ordered north.
Chas. B. Baulch....	July 30	do.....	Ice schooner. Loaded with ice for U. S. forces in Cuba; donated by Mr. Mackey, of New York. Left at Santiago when Colonel Humphrey was ordered north.

Transports arriving in Cuba not of the original expedition—Continued.

Name.	Date of arrival.	Where.	Cargo, where unloaded.
Berlin	Aug. 2	Santiago	Colonel Hood's regiment of immunes. Troops debarked and ship ordered to New Orleans Aug. 5, with civilian employees, sick and discharged soldiers.
	Aug. 22	.....do	Colonel Crane's regiment of immunes. Troops debarked. Loaded with troops and ordered to Montauk Point Aug. 25. (See list showing arrival and departure of transports.)
Fanita	Aug. 2	.....do	Civilian employees, camp equipage, and commissary stores. Loaded with civilian employees and ordered to Port Tampa Aug. 25.
Grande Duchesse .....	.....do .....	.....do	Quartermaster and commissary stores, from Porto Rico. Quartermaster stores unloaded, but commissary stores remained on board when ship was loaded with troops and ordered to Montauk Point Aug. 10. (See list showing arrival and departure of transports.)
Michigan	Aug. 4	.....do	About 400,000 pounds refrigerator beef, mules, wagons, and forage. Much unavoidable delay in unloading this ship of mules, wagons, and forage, it being the intention to send these to Porto Rico. The beef was unloaded daily as required for issue to troops, but in this case, as in the case of the beef on the Port Victor, the issue decreased daily owing to the shipment of troops north. Vessel left at Santiago when Colonel Humphrey was ordered north.
Triton	Seized Aug. 6.	.....do	Steam tugboat. Required for use at and in the vicinity of Santiago, and therefore seized by order of General Shafter. No formal contract entered into.
Tarpon	Aug. 6	.....do	Steam lighter and water boat; towed Suwanee to Santiago from Port Tampa. Used for lightering purposes in and at mouth harbor; also for watering United States and Spanish transports. Left at Santiago when Colonel Humphrey was ordered north.
Suwanee .....	.....do .....	.....do	Snag boat; towed by Tarpon from Port Tampa to Santiago en route to Porto Rico. Left at Santiago when Colonel Humphrey was ordered north.
Mobile	Aug. 10	.....do	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 12. (See list showing arrival and departure of transports.)
Tofa .....	.....do .....	.....do	Coalschooner. Used in supplying necessary coal to transports. Left at Santiago when Colonel Humphrey was ordered north.
Arkadia	Aug. 11	.....do	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 16. (See list showing arrival and departure of transports.)
Mohawk	Aug. 15	.....do	Light, from Porto Rico. Loaded with troops and ordered to Montauk Point Aug. 20. (See list showing arrival and departure of transports.)
Minnewaska	Aug. 17	.....do	Colonel Ray's regiment of immunes and firewood. Troops debarked and part of cargo discharged. Loaded with troops and ordered to Montauk Point Aug. 23. (See list showing arrival and departure of transports.)
Swan	Aug. 18	.....do	Coalschooner. Used in supplying necessary coal to transports. Left at Santiago when Colonel Humphrey was ordered north.
Bergen	Aug. 19	.....do	Coalschooner. Used in supplying necessary coal to transports. Left at Santiago when Colonel Humphrey was ordered north.
Florida	Aug. 21	.....do	Light, from Porto Rico. Left at Santiago when Colonel Humphrey was ordered north.
Bay State .....	.....do .....	.....do	Massachusetts State hospital ship. Loaded with sick and ordered to Montauk Point Aug. 24. (See list showing arrival and departure of transports.)
Harrisburg	Aug. 23	.....do	Steam collier. 150 tons of coal transferred to Florida at Santiago; ordered to Ponce, Porto Rico, with the balance Aug. 26.
Roumanian	Aug. 25	.....do	Colonel Sergeant's regiment of immunes. Troops debarked. Loaded with troops and convalescents and ordered to Montauk Point Aug. 29. (See list showing arrival and departure of transports.)

Transports arriving in Cuba not of the original expedition—Continued.

NAVAL VESSELS.

Name.	Date of arrival.	Where.	Cargo, where unloaded.
Yale.....	June 27	Siboney.....	33d Michigan Volunteer Infantry, 1 battalion 34th Michigan Volunteer Infantry, camp and garrison equipage, ammunition, and commissary stores. Troops unloaded by ship's boats; property unloaded by steamer Manteo and steam lighter Laura. Camp equipage and ammunition discharged at Daiquiri.
	July 11	Siboney.....	General Miles and staff, 6th Massachusetts Volunteer Infantry, and part of 3d Illinois Volunteer Infantry. Not unloaded in Cuba.
	Aug. 17	Outside of harbor.	8th Illinois Volunteer Infantry, and medical stores. Troops and stores were lightered to the wharves inside the harbor by steamers Orizaba and Berkshire. Troops lightered out to her and she was ordered to Montauk Point Aug. 19. (See list showing arrival and departure of transports.)
Harvard.....	July 1	Siboney.....	9th Massachusetts Volunteer Infantry, 2 battalions 34th Michigan Volunteer Infantry, and regimental property. Unloaded at once by means of ship's boats and lighters.
	Aug. 18	Outside of harbor.	Light. Troops lightered out to her, and she was ordered to Montauk Point Aug. 21. (See list showing arrival and departure of transports.)
St. Paul.....	July 10	Siboney.....	8th Ohio Volunteer Infantry, civilian employees, clothing and quartermaster stores in charge of Captain Goff, A. Q. M., volunteers, troops, and stores transferred to steamer Comal at Guantanamo Bay, taken to Santiago and debarked. After going north she returned to Guantanamo Bay, where troops were lightered to her by steamers Berkshire and Specialist on Aug. 11, when she was ordered to Montauk Point. (See list showing arrival and departure of transports.)
St. Louis.....	Aug. 8	Outside of harbor.	Light. Loaded with troops, lightered out to her, and ordered to Montauk Point Aug. 10. (See list showing arrival and departure of transports.)
Badger.....		Guantanamo Bay.	Light. Loaded with troops at Guantanamo Bay by steamers Berkshire and Specialist, and ordered to Montauk Point Aug. 18. (See list showing arrival and departure of transports.)
Resolute.....	July 24	Santiago.....	Hospital supplies and nurses. Was immediately unloaded by the steamer Berkshire, which vessel went to Siboney to debark medical supplies. Could land but few, owing to the surf. Returned to Santiago, and stores were sent down on the tug Underwriter which was only partially unloaded because of surf. Tug returned to Santiago, and remaining stores were shipped by rail and wagon transportation. Loaded with troops at Guantanamo Bay by steamers Berkshire and Specialist and ordered to Montauk Point Aug. 18. (See list showing arrival and departure of transports.)
Prairie.....	Aug. 20	Santiago.....	Light. Loaded with troops and ordered to Montauk Point Aug. 21. (See list showing arrival and departure of transports.)
Panther.....	Aug. 26	Santiago.....	Light. Loaded with troops and ordered to Montauk Point Aug. 26. (See list showing arrival and departure of transports.)

Water, ice, and coal supplied to vessels requiring same.

Name.	Date of departure.	Water.	Ice.	Coal.	Remarks.
		<i>Gallons.</i>	<i>Tons.</i>	<i>Tons.</i>	
Allegheny	July 28		10		
Berkshire	Aug. 26	10,000	20	150	
Breakwater	Aug. 14		10		
Comal	July 28	15,000			8,000 gallons water bought.
Clinton	Aug. 21		5		
City of Washington	Aug. 28	10,000	12		
D. H. Miller	Aug. 19	10,000		150	
Iroquois	July 31	15,000			
Leona	Aug. 16	10,000	10	50	
Matteawan	Aug. 8		15		Condenser with capacity of 11,000 gallons daily.
Miami	Aug. 8		15		Condenser with capacity of 10,000 gallons daily.
Orizaba	Aug. 26	4,000	15	200	
San Marcos	July 28	15,000			9,000 gallons water bought.
Santiago	Aug. 20		15		
Seneca	Aug. 13	15,000	10		
Vigilancia	Aug. 9	20,000	20		
Yucatan	Aug. 20		10		
Specialist	Aug. 23	10,000	10		Small condenser.
Unionist	Aug. 26		9		Do.
Comanche	Aug. 13		25		
City of Macon	Aug. 14	10,000	15	150	
Gate City	Aug. 7	16,000	10		
Hudson	Aug. 19	6,000	10		
Catania	Aug. 17	10,000	20		Do.
Nueces	Aug. 26	15,000	30	250	Do.
Berlin	Aug. 25	14,000	10		
Grande Duchesse	Aug. 10	20,000	40	250	Condenser (broken); 350 tons coal moved.
Fanita	Aug. 25	7,000	6		
Mobile	Aug. 12	20,000	25		
Alacante	Aug. 10	10,000			Spanish transport.
Isla de Luzon	Aug. 14	10,000			Do.
Arkadia	Aug. 16	5,000	15		Condenser.
P. Satrustiqui	Aug. 24	21,700			Spanish transport.
Montevideo	Aug. 25	21,700			Do.
Isla de Panai	Aug. 20	21,700			Do.
Villaverde	do	10,000			Do.
Mohawk	do	7,500	50		Condenser.
Covadonga	Aug. 19	10,000			Spanish transport.
St. Agustin	do	10,000			Do.
Minnewaska	Aug. 23	15,000	40		
Bay State	Aug. 24			70	Massachusetts State hospital ship.
Mortera	Aug. 12	9,300	6		Prize vessel.
Florida	(a)		10	150	Condenser.

a Left in harbor.

NOTE.—The light-draft steamers, tugs, and steam lighters were kept fully supplied with coal and water.

Arrival of all transports in Cuba, showing date of departure, how loaded, and destination.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning.	Destination.
Alamo	June 20	July 22	Civilian employees, sick and discharged soldiers.	Fort Monroe.
Allegheny	do	July 28	Civilian employees, sick and discharged soldiers.	Port Tampa.
	Aug. 22	Aug. 24	9th Massachusetts Volunteer Infantry (500 men).	Montauk Point.
Aransas	June 20	July 20	Civilians, sick and discharged soldiers.	Port Tampa.
Berkshire	do	Aug. 26	400 convalescents.	Montauk Point.
Breakwater	June 20	July 9	Wounded	Fort Monroe.
	Aug. 11	Aug. 14	2 battalions 12th U. S. Infantry (9 officers and 339 men).	Montauk Point.
Cherokee	June 20	July 5	Sick and wounded.	Key West.
Comal	do	July 28	Civilian employees, sick and discharged soldiers.	Port Tampa.
Concho	do	July 22	Sick (from Siboney).	Fort Monroe.
Clinton	do	July 23	Discharged employees.	Port Tampa.
	Aug. 15	Aug. 21	Red Cross Society	Havana.

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Arrival of all transports in Cuba, showing date of departure, how loaded, and destination—Continued.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning.	Destination.
City of Washington.	June 20	July 8	Sick and wounded.	Port Tampa.
	Aug. 24	Aug. 28	Colonel Humphrey and civilian employees.	Montauk Point.
Cumberland	June 20		Vessel left at Santiago when Colonel Humphrey was ordered north.	
D. H. Miller	do	June 30	Civilian employees, sick and discharged soldiers.	Port Tampa.
Gussie	Aug. 14	Aug. 19	1st U. S. Infantry (425 men)	Montauk Point.
	June 20	June 30	Civilian employees, sick and discharged soldiers.	Port Tampa.
Iroquois	July 24	July 26	Forage and mules	Porto Rico.
	June 20	July 2	Sick and wounded	Key West.
	July 20	July 31	Sick officers and civilian employees	New York.
Kanawha	June 20		Water boat, left at Santiago when Colonel Humphrey was ordered north.	
Knickerbocker	do	July 30	Civilian employees, sick and discharged soldiers.	Port Tampa.
	Aug. 28		Vessel left at Santiago when Colonel Humphrey was ordered north.	
Laura	June 20		Steam lighter, left at Santiago when Colonel Humphrey was ordered north.	
Leona	do	July 22	Sick (from Siboney)	Fort Monroe.
	Aug. 14	Aug. 16	2 troops 9th U. S. Cavalry, 1 company 34th Michigan, 3 companies 12th U. S. Infantry, Ennis Battery, and Gatling Gun Detachment (600 men).	Montauk Point.
Manteo	June 20		Vessel left at Santiago when Colonel Humphrey was ordered north.	
Matteawan	do	Aug. 8	3d and 6th U. S. Cavalry (430 men).	Do.
Miami	do	do	1st Volunteer Cavalry and General Wheeler's headquarters (700 men).	Do.
Morgan	do	July 3	Civilian employees, sick and discharged soldiers.	Port Tampa.
Olivette	do	July 10	Sick and wounded	Fort Monroe.
	Aug. 2	Aug. 15	Sick	Do.
Orizaba	June 20	Aug. 26	Sick paymasters.	Montauk Point.
Rio Grande	do	July 22	Sick (from Siboney).	Fort Monroe.
	Aug. 12	Aug. 13	9th and 10th U. S. Cavalry (625 men).	Montauk Point.
San Marcos	June 20	July 28	Civilian employees, sick and discharged soldiers.	Port Tampa.
Santiago	do	July 24	Sick	Fort Monroe.
	Aug. 17	Aug. 20	Part 34th Michigan (636 officers and men).	Montauk Point.
Saratoga	June 20	July 21	Civilian employees, sick and discharged soldiers.	Port Tampa.
	Aug. 25		Vessel left at Santiago when Colonel Humphrey was ordered north.	
Segurança	June 20	July 31	Civilian employees, sick and discharged soldiers.	Do.
Seneca	do	July 14	Sick and wounded	Fort Monroe.
	Aug. 11	Aug. 13	4th U. S. Infantry (420 men)	Montauk Point.
Stevens	June 20	July 13	Water schooner	Mobile.
Stillwater	do	July 13	Sick and wounded	Port Tampa.
Vigilancia	do	Aug. 9	1st U. S. Cavalry (750 men)	Montauk Point.
Whitney	do	June 30	Civilian employees, sick and discharged soldiers.	Port Tampa.
Yucatan	do	July 28	do	Do.
	Aug. 17	Aug. 20	7th U. S. Infantry (500 men).	Montauk Point.
Louisiana	June 30	Aug. 1	Civilian employees, sick and discharged soldiers.	New York.
Rita	July 9	July 17	Not unloaded in Cuba.	Porto Rico.
Specialist	July 9	July 15	Unloaded of artillery and horses; reloaded and sent to General Miles.	Do.
	Aug. 2	Aug. 23	Captains of 4 light batteries, enough enlisted men to care for horses, 291 horses, guns, ammunition, harness, etc.	Montauk Point.
Unionist	July 9	July 15	Unloaded of artillery and horses; reloaded and sent to General Miles.	Porto Rico.
	Aug. 21	Aug. 26	Horses and attendants	Montauk Point.

Arrival of all transports in Cuba, showing date of departure, how loaded, and destination—Continued.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning.	Destination.
Comanche	July 9	July 15	Horses, artillerymen, and part of commissary stores unloaded; received portable shields from Gate City and sent to General Miles.	Porto Rico.
City of Macon	Aug. 12	Aug. 13	25th U. S. Infantry (493 men)	Montauk Point.
	July 9	July 19	Troops unloaded at Siboney. Stores sent to General Miles.	Porto Rico.
Gate City	Aug. 11	Aug. 14	17th U. S. Infantry (22 officers and 445 men).	Montauk Point.
	July 9	Aug. 7	Part of 3d U. S. Cavalry, 6th U. S. Cavalry, and General Sumner's headquarters (35 officers and 505 men).	Do.
Hudson	do	July 20	Sick and wounded	Fort Monroe.
	Aug. 18	Aug. 19	Part 1st District of Columbia Volunteer Infantry (500 men).	Montauk Point.
Catania	July 10	Aug. 17	Hospital ship, 400 sick and one company as guard.	Do.
Underwriter	July 16	-----	Tugboat, left at Santiago when Colonel Humphrey was ordered north.	
Nueces	July 19	July 19	Not unloaded in Cuba	Porto Rico.
	Aug. 20	Aug. 26	Part of 1st Illinois Volunteer Infantry and part of 24th U. S. Infantry (491 men).	Montauk Point.
Lampasas	July 19	July 19	Not unloaded in Cuba	Porto Rico.
Mississippi	July 20	July 30	Beef and stevedores taken off; sent to General Miles.	Do.
Panama	July 22	July 24	Not unloaded in Cuba	Do.
Bessie	July 24	-----	Steam lighter, left at Santiago when Colonel Humphrey was ordered north.	
Port Victor	July 27	-----	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Chas. B. Baulch	July 30	-----	Ice schooner, left at Santiago when Colonel Humphrey was ordered north.	
Berlin	Aug. 2	Aug. 5	Civilian employees, sick and discharged soldiers.	New Orleans.
	Aug. 22	Aug. 25	Part of 9th Massachusetts Volunteer Infantry, part of 1st Illinois Volunteer Infantry, and General Bates's headquarters (900 men).	Montauk Point.
Grande Duchesse	Aug. 2	Aug. 10	16th U. S. Infantry and 2 battalions 71st New York Volunteer Infantry (1,200 men).	Do.
Fanita	do	Aug. 25	Civilian employees	Port Tampa.
Michigan	Aug. 4	-----	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Triton	Seized	-----	Tugboat, left at Santiago when Colonel Humphrey was ordered north.	
Tarpon	Aug. 6	-----	Vessel left at Santiago when Colonel Humphrey was ordered north.	
Suwanee	do	-----	Snag boat, left at Santiago when Colonel Humphrey was ordered north.	
Mobile	Aug. 10	Aug. 12	8th and 22d U. S. Infantry, 2d Massachusetts Volunteer Infantry, and General Ludlow's headquarters (1,700 men).	Montauk Point.
Alacante	Aug. 8	Aug. 10	Spanish sick (38 officers and 1,000 men).	Spain.
Isla de Luzon	Aug. 10	Aug. 14	Spanish soldiers (1,400 officers and men).	Do.
Tofa	do	-----	Coal schooner, left at Santiago when Colonel Humphrey was ordered north.	
Arkadia	Aug. 11	Aug. 16	Two batteries light artillery, 156 horses (2 officers and 161 men).	Montauk Point.
P. Satrustiqui	Aug. 13	Aug. 24	Spanish soldiers (2,067 men and 125 officers).	Spain.
City of Madrid	Aug. 15	-----	Spanish transport, left at Santiago when Colonel Humphrey was ordered north.	
Montevideo	do	Aug. 25	Spanish soldiers (139 officers and 2,400 men).	Do.
Isla de Panai	do	Aug. 20	Spanish soldiers (1,100 men and 76 officers).	Do.

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Arrival of all transports in Cuba, showing date of departure, how loaded, and destination—Continued.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning	Destination.
Villaverde	Aug. 15	Aug. 20	Spanish soldiers (1,064 men and 75 officers).	Spain.
Mohawk	do	do	8th Ohio Volunteer Infantry (1,145 men).	Montauk Point.
Covadonga	Aug. 16	Aug. 19	Spanish soldiers (2,257 officers and men).	Spain.
St. Agustin	do	do	Spanish soldiers (1,400 men and 97 officers).	Do.
Leon Trece	Aug. 17		Spanish transport, left at Santiago when Colonel Humphrey was ordered north.	
Minnewaska	do	Aug. 23	Part of 33d Michigan Volunteer Infantry, part of 1st District of Columbia Volunteer Infantry, 2d U. S. Cavalry and horses, Engineer Corps, and Balloon Signal Detachment (13 officers and 728 men).	Montauk Point.
Swan	Aug. 18		Coal schooner, left at Santiago when Colonel Humphrey was ordered north.	
San Ygnacio de Loyola	do		Spanish transport, left at Santiago when Colonel Humphrey was ordered north.	
Bergen	Aug. 19		Coal schooner, left at Santiago when Colonel Humphrey was ordered north.	
Florida	Aug. 21		Vessel left at Santiago when Colonel Humphrey was ordered north.	
Bay State	do	Aug. 24	Massachusetts State hospital ship, 100 sick.	Do.
San Francisco	do		Spanish transport, left at Santiago when Colonel Humphrey was ordered north.	
Harrisburg	Aug. 23	Aug. 26	Steam collier	Porto Rico.
Roumanian	Aug. 25	Aug. 29	2 companies 9th Massachusetts Volunteer Infantry and 400 convalescents.	Montauk Point.

NAVAL VESSELS.

Yale	June 27 Aug. 17	June 30 Aug. 19	Light	Montauk Point.
Harvard	July 1 Aug. 18	July 8 Aug. 21	3d and 20th U. S. Infantry (1,055 men).	
St. Paul	July 10 (a)	July 21 Aug. 11	Light	Do.
St. Louis	Aug. 8	Aug. 10	33d Michigan Volunteer Infantry (830 men).	New York.
Badger	(a)	Aug. 18	2d U. S. Infantry, 1 battalion 71st New York Volunteer Infantry, and General Kent's headquarters (1,200 men).	Montauk Point.
Resolute	July 24 (a)	July 24 Aug. 18	9th and 10th U. S. Infantry, and 2 companies 71st New York Volunteer Infantry (800 men).	Do.
Prairie	Aug. 20	Aug. 21	3 companies of 34th Michigan Volunteer Infantry (200 men).	Do.
Panther	Aug. 26	Aug. 26	Light	Do.
			Headquarters artillery brigade, lieutenants and larger part of enlisted men of four light batteries—about 120 men on Specialist to care for horses (250 men).	
			3 companies 7th U. S. Infantry (200 men).	Do.
			2 companies 9th Massachusetts Volunteer Infantry (125 men).	Do.

a Guantanamo.

Arrival of all transports in Cuba, showing date of departure, how loaded, and destination—Continued.

PRIZE VESSELS.

Name.	Date of arrival.	Date of departure.	Troops or civilians returning.	Destination.
Mexico	In harbor.	Aug. 25	Headquarters 5th Army Corps, 1 Company 1st U. S. Infantry (95 officers and men).	Montauk Point.
Mortera	do	Aug. 12	Part of 21st U. S. Infantry (18 officers and 288 men).	Do.
Reina de Los Angeles.	do		Used as hospital ship; left at Santiago when Colonel Humphrey was ordered north.	Do.
San Juan	do		Used for carrying passengers and freight between Santiago and other points on the southeast coast of Cuba; left at Santiago when Colonel Humphrey was ordered north.	Do.
Tomas Brooks	do		do	Do.

NOTE.—Water and coal were furnished all vessels requiring same. Ice was furnished all vessels requiring it, after the arrival of ice schooner *Chas. B. Baulch*, July 30, before which date vessels were compelled to depart without it, there being none to be had.

WASHINGTON, D. C., *September 15, 1898.*

Respectfully submitted.

C. F. HUMPHREY,
Colonel, Chief Quartermaster of the Expedition.

WASHINGTON, D. C., *January 16, 1899.*

TESTIMONY OF CAPT. HOMER F. ASPINWALL.

Capt. HOMER F. ASPINWALL, being duly sworn, testified as follows:

By Dr. CONNER:

Q. Captain, be kind enough to state your name and rank and the duties you have been engaged in during the war with Spain.

A. Capt. Homer F. Aspinwall; my assignment was the U. S. transport *Manitoba*. I took command of that ship the latter part of July, in New York Harbor, and proceeded with her to Newport News, Va., where she was loaded with commissary stores and quartermaster's stores and troops for Ponce, Porto Rico.

Q. At the time you were ordered on this duty were you quartermaster or commissary?

A. I was assistant quartermaster and acting commissary.

Q. As respects beef, did you see it before it was put on the vessel—the *Manitoba*?

A. I saw it as it was taken out of the refrigerator cars at the dock at Newport News, Va.

Q. What was its condition at that time, as far as you could determine?

A. Its condition was good, as far as I could determine.

Q. There was nothing in its appearance or in its smell to lead you to think it was not proper for food?

A. Nothing whatever.

Q. Was there anything about it at all other than the conditions that belong to refrigerated beef?

A. No, sir; the beef was all encased in a sort of muslin covering—cheese cloth. It was taken out of the cars and put in the refrigerator boxes on board ship, where it was hung on hooks or set down in the bottom of the ship with frames between each quarter. The chief engineer of my ship was a man who had been carrying refrigerated beef for a number of years between New York and London on this same ship.

By General McCook:

Q. What was his name?

A. Robert Bell.

(Witness, continuing former answer:) I had confidence in him, because of my own knowledge I knew nothing of the care and preservation of refrigerated beef, and I asked him to take the temperature of this beef and make examination and see the beef was all right. I thought that as it was placed on board the ship I would be obliged to give receipts, and I wanted to know whether it was all right. He made that examination and tested the beef inside, and took the temperature of the atmosphere, and made me a full report of the condition of the beef. He was somewhat doubtful about the temperature of the atmosphere.

Q. Where?

A. At Newport News, where this beef was loaded. He said the beef should be loaded during the night; it was loaded during the daytime. As soon as it was placed on board ship the refrigerator boxes were then closed, and we sailed for Ponce.

Q. Was that ship so fitted up that beef could be preserved for any reasonable length of time upon her?

A. Yes, sir.

Q. She had her own refrigerator plant?

A. Yes, sir.

Q. Was that in good working order?

A. Yes, sir.

Q. Did she have plenty of supplies to continue the machine in its work?

A. Yes, sir.

By Governor WOODBURY:

Q. What was the date of loading and sailing?

A. The loading commenced on the 3d of August—3d, 4th, and I think we sailed on the 5th. I think the meat was all placed on board the 3d and 4th of August; some might have been placed on board on the 5th.

By Dr. CONNER:

Q. During the time the ship was going from Newport News was the machinery kept in motion?

A. Yes, sir.

Q. Was it ice or ammonia you used?

A. Ammonia.

Q. What was the average temperature of the room in which the meat was kept during the trip to Porto Rico?

A. As I said, this was new business to me, and I relied entirely upon the refrigerator engineer and the chief engineer of the ship in whose care, under me, this beef was placed. They reported to me every day the temperature of the boxes; and the chief engineer was concerned about it, because he said it was impossible for him to get those boxes lower than 33° and 34°—most of the time about 34° F.

Q. What was the maximum temperature reported to you?

A. Thirty-four.

Q. At no time above it?

A. No, sir.

Q. At what date did you reach Porto Rico?

A. I reached Ponce at noon of the 10th of August.

Q. How soon did you begin issuing the beef on board?

A. Well, I did not issue any of that beef.

Q. It was not taken out of the boxes at all?

A. No, sir; not at Ponce; not until later.

Q. At what point, then?

A. In order to make this narrative complete I might say, with your permission, that when I reached Ponce at noon of August 10 I ran aground $2\frac{1}{2}$ or 3 miles from the wharf, and as soon as possible thereafter I went ashore in a small boat. But we were there aground for some time—that was Wednesday—and we did not get off the reef until Sunday morning. While we were on that reef there was about four hours that one of the pipes was stopped up, so the engineer reported to me, and they could not get sufficient sea water, and the result was the temperature in the boxes went up, as I remember, to nearly 46. But this pipe was soon opened, and the temperature was then reduced.

Q. How soon was it brought down below 40?

A. Some time during the night.

Q. How many hours, think you, elapsed during which the temperature of these boxes was not below 40?

A. Well, there could not have been—as that pipe ceased to work, it was only about four hours from the time it clogged up until it was again in complete working order.

Q. And after it got in working order how much time elapsed before the temperature was brought down from 46 to 40?

A. During the night. That was in the afternoon, and during the night it was reduced down to 34.

Q. As I understand, you did not discharge any of this beef at Ponce?

A. No, sir.

Q. You went from there to what point?

A. On the 24th of August I went to Mayaguez.

Q. You left Newport News when?

A. On the 5th of August.

Q. Nineteenth—twentieth day?

A. At Mayaguez I opened these boxes for the first time. I reported to the depot commissary there—Lieutenant Alexander—and he said, "I am very glad you come; I want some of that fresh meat;" and I issued what he wanted. He had 1,500 troops and he was supplied each day. The first consignment was shipped to the troops in and about the town, which has about 10,000 inhabitants. He had all his troops there but 150, who were about 15 miles in the country. He took the first consignment out 15 miles to these troops. The roads were very bad, and it was placed, as he told me, in an ox cart, and they did not reach the destination until some time in the afternoon, and when they arrived there the beef was spoiled owing to the action of the sun; but he said he had not been discouraged, as all the beef issued to the troops at Mayaguez was of excellent quality, and he continued to give me requisitions for it for the time I was there.

Q. How long were you there?

A. About a week.

Q. When you left was the meat in good condition?

A. It was.

Q. You had no reason to think it was spoiled or unfit for use?

A. None whatever. In fact, I know it was all right.

Q. Leaving Mayaguez, where did the ship go?

A. Back to Ponce.

Q. Did she there discharge any of her beef?

A. When I returned to Ponce I issued this beef to Lieutenant-Colonel Smith, a depot commissary who had arrived since I left, and he came and introduced himself and said he was there to assist me in disposing of the cargo of refrigerated beef that I had, and I expressed my gratification to have assistance along that line, and we arranged to take it out. He said he wanted about 5,000 pounds a day, and we arranged as to the time we should take it out; and I told him I would open those boxes when it would suit his convenience, but suggested the early morning hours, and then to issue it for that day. So it was arranged to take it out at 5 o'clock and take it ashore in a lighter and issue it to the troops in and about Ponce. By mistake of someone the lighter came with the order from Colonel Smith at 5 o'clock in the afternoon instead of the morning, and 5,000 pounds of beef was taken out and put into this lighter and taken ashore and kept there until the next morning and then issued to the troops.

Q. Was there any means of protecting the meat on shore other than the ordinary means of shelter?

A. No, sir. Then Colonel Smith said to me the next day—he said there was one issue of that meat to a detachment which was pronounced bad by the surgeon of the regiment—he did not say what surgeon it was—and the surgeon ordered it buried. He said the rest of the troops were satisfied with it, and the surgeon in charge of the general hospital, Surgeon Birmingham, said it was the best meat he had had while in charge of that hospital.

Q. That was a part of this issue?

A. Yes, sir; it was taken out at 5 o'clock in the afternoon, kept all night, and not issued until 10 o'clock the next day.

Q. How long did you remain there at Ponce issuing this?

A. Until the 7th of September, when I was ordered back to New York with troops.

Q. During this time, which covered a period of fourteen days—

A. I returned to Ponce on the 31st of August.

Q. During these eight days was any complaint made to you, other than the one you have spoken of, of the meat not being good?

A. No, sir.

Q. Where did you go then?

A. To New York.

Q. How much meat was there still in the boxes?

A. Most of my papers are on the ship, which is still in Havana, but my recollection is there was between 20,000 and 25,000 pounds issued at Ponce and possibly 6,000 or 7,000 pounds at Mayaguez.

Q. How much, then, was on board the ship when you left for New York?

A. The exact amount I do not know. I had 1,755 quarters, approximately 300,000 pounds; and possibly there might have been issued 50,000 pounds, for in addition to the beef issued to the troops at Mayaguez and at Ponce I used it on my trip back from Mayaguez to New York in the ship's stores for the officers' table. I had on board the Sixth Illinois, General Garretson and staff, and the Danville, Ill., battery.

Q. Was any of it issued to the enlisted men?

A. No, sir; but the officers' messes were supplied with it on the trip north.

Q. What was the reason it was not issued to them?

A. There were no facilities for cooking fresh beef. Since that time kettles have been placed on board.

Q. When you reached New York how many quarters do you think you had left?

A. I should say 250,000 pounds were left.

Q. Out of 300,000 in all?

A. Yes, sir.

Q. So that five-sixths were still on board after you returned to New York City?

A. Yes, sir.

Q. What became of it after you arrived there?

A. Two days before I reached New York the steward reported to me that the beef in the boxes was in such a condition that he was obliged to cut away nearly one-third of each quarter that had been spoiled and throw it overboard.

Q. During this trip were you receiving daily reports of the temperature of the boxes, as going out?

A. Yes, sir.

Q. Was the temperature still low enough to keep the beef?

A. About 34, though the chief engineer was still nervous about not being able to get it lower, though he expressed himself as gratified with the condition of the beef.

Q. Why, if the temperature of 34 was maintained, should there have been this change in the beef during the time you were returning from Porto Rico to New York?

A. I do not know. This beef had been aboard the ship about forty days, and I suppose—I do not know what length of time beef can be kept in a refrigerator; and I do not know of any conditions why, unless it was some conditions of the water—the Porto Rican water. The temperature of it was hotter than up here.

Q. I understand the temperature was kept low by the action of the plant?

A. Yes, sir.

Q. Were the boxes frequently opened?

A. These boxes were not opened. The first time was at Mayaguez.

Q. But afterwards, on the return trip?

A. Let me explain. There are two meat boxes in which the consignment of beef was stored—the upper and the lower. Then there is another box for the ship's stores. We opened this large refrigerator and took meat from that and put it into this place for the ship's stores.

Q. Every day?

A. No, sir; about once in every three days. We would take it, and I would invoice it to myself, from the quartermaster's to the commissary department, and then we supplied the ship, the officers' table, of which there were about 70, with this meat taken from that.

Q. How long before you reached New York was the report made by the steward that it had to be cut so deeply?

A. About two days out from New York.

Q. On the following day what was the report on the meat to you?

A. That the meat was getting worse.

Q. Did you still continue to use that for the officers' table?

A. Yes, sir; until we reached New York, on the 13th.

Q. Did you find its taste or odor objectionable?

A. I did not. I ate it every day, and none of the officers made any complaint. I would not have been surprised had they; but the steward was so careful in his trimming of it.

Q. After reaching New York with five-sixths of the original shipment on board, after a lapse of forty days, what became of the beef?

A. I reported the condition to Lieutenant-Colonel Woodruff, that the steward and chief engineer reported the meat as unfit for use, and I was then ordered immediately from New York to Montauk Point, and he told me to report at Montauk Point to Colonel Weston, which I did.

Q. You took your ship to Montauk Point?

A. Yes, sir; I reported the condition as soon as I reached Montauk Point to Colonel Weston, and he put himself in communication with the Commissary-General, and a board of survey was convened.

Q. What date was that board convened, and who were the members of it?

A. I am speaking from memory. I think it was convened about the 17th of September. I arrived at New York on the 18th; on the evening of the 14th I sailed from New York to Montauk Point, and arrived there on the morning of the 15th, and this board of survey met, I think, on the 17th.

Q. Who were the members of that board?

A. Captain James, of the Twenty-fourth Infantry, and two other officers of the Twenty-fourth Infantry.

Q. Was any issue of this meat made between leaving Porto Rico and the time of convening this board of survey except what you used and what was taken for the use of the officers' table on board ship?

A. No, sir.

Q. What was the action of the board of survey or its findings?

A. They condemned it as unfit for use or issue to troops.

Q. Was it destroyed?

A. Yes, sir.

Q. Was there anything, any trouble, with the ice plant except the one you have mentioned of a few hours' duration at Porto Rico?

A. No, sir.

By General DODGE:

Q. Upon whom does the loss of that beef fall?

A. My understanding of that is, General, that the beef belonged to Swift & Co., and that the proceedings of the board of survey were arrested before the finding was made, as the ownership of the beef did not at that time rest in the Government. In fact, I was instructed by the Quartermaster's Department to make no disposition of this beef until I received orders from Swift & Co.

Q. Did you receive any orders from Swift & Co.?

A. Yes, sir.

Q. And did you destroy it?

A. It was taken out of the ship and put on board a lighter.

Q. And you returned to New York from Montauk?

A. Yes, sir.

Q. Before the beef could be taken out?

A. Yes, sir. I did not want that large quantity of beef on board, as I felt it would injure the sanitation of the ship, and consequently I was vigorous in my calls on the Quartermaster's Department, and I soon received a message that the ownership was in Swift & Co. and instructions that I should make no move until I heard from them.

Q. After the beef was removed from the boxes, what measures were taken to disinfect those boxes?

A. Thoroughly washed out with the hose, chloride of lime used, and the boxes were fumigated, and all precautions taken by those familiar with that work.

Q. Were the results satisfactory?

A. I judge so, for the next trip to Porto Rico 124 quarters of beef were placed on board in these boxes, and it was used for issue to troops on the way down and there was no complaint.

Q. Has there been, so far as you know, any rotting of beef that was placed in those boxes?

A. No, sir; that was the largest quantity ever placed in a ship up to the 24th of December last.

Q. You have heard of no injurious effects from this rotten beef?

A. No, sir.

By Governor WOODBURY:

Q. Why was such a large shipment of fresh beef made to Porto Rico; do you know?

A. I suppose for issue to the troops in Porto Rico. There was a large number of troops at Ponce when I went there.

Q. Why was not the beef issued as intended?

A. I do not know. I made daily trips to the depot commissary at Ponce.

Q. Was it your expectation when you left Ponce for New York that the beef would reach New York in condition to be sold?

A. From the reports I had I thought it would be spoiled.

Q. Did you report that to any superior officer on the island, that you thought it would be unfit to take it there?

A. No, sir; I reported the beef on my arrival there, and while we were lying there the engineer thought the beef would spoil on account of sand choking the pipe, etc.

By Dr. CONNER:

Q. Were there proper means on shore to take care of this if sent there?

A. No, sir.

Q. Then it would necessarily have spoiled very promptly even if landed?

A. Certainly.

Q. It could not be issued to troops except in a very short time?

A. As I say, I was in and about Ponce nearly a month, with the exception of six days at Mayaguez, and I used to go to the depot commissary and try to prevail upon him to take this meat. My recollection is he said he was feeding about 5,000 troops in and around Ponce.

Q. That is about 5,000 pounds a day.

A. Yes, sir. But he said, "I have no means of getting it ashore."

By Governor WOODBURY:

Q. Didn't you have too much beef there at that time for the troops?

A. Yes, sir.

Q. It would have spoiled before you could use it even if you had not come to New York?

A. I think that is true.

Q. Had you any conception or intimation from anybody that this beef would have spoiled but that it was treated with chemicals?

A. No, sir.

Q. When was your first intimation?

A. The first intimation was newspaper accounts of investigations carried on by this board.

Q. What month?

A. You will pardon me; in service on a Government transport I would get a paper thirty days old sometimes and ten days old at another.

Q. What month did you read it?

A. I think the first time was during the month of December.

Q. Did you ever have any conception imparted to you that the tinned roast beef had been treated chemically?

A. No, sir.

By Captain HOWELL:

Q. Did you have any intimation at all that this beef was in any way treated by anybody?

A. No, sir.

Q. Did your skilled man there, Mr. Bell, say it was?

A. The subject never came up. I might say, if you gentlemen desire, with reference to a little occurrence on the ship about the tinned roast beef: There was a complaint made to me that a couple of soldiers were sick, caused by eating tinned roast beef. In order to explain it, I would say I had nothing to do with the troops; but my instructions from the Quartermaster and Commissary-General were to see that the troops had everything necessary for their comfort during these trips. They insisted I should make examinations of the hard bread and meat and to listen to any complaint. This complaint was about a soldier being made sick from eating some canned roast beef. I went down and took the ship's surgeon with me, and we found the can of beef, and it had been opened and set off at the side of the ship for a day and a half, and when the soldier came to eat it the second time the meat was spoiled. The surgeon examined it, and he pronounced it spoiled, and so did I; but I judge from the nature of that class of goods that almost any class of goods would spoil under those circumstances.

By Dr. CONNER:

Q. Is that the only can you know of that was spoiled?

A. That is the only one.

By General DODGE:

Q. Did the soldiers on board use that canned roast beef?

A. Yes, sir.

Q. Did any complain?

A. I saw them every day, and some complained that they did not have enough to eat and others said it was not good. I asked one soldier what was the trouble with the ration, and he said it was not good, the meat was not good, and it was traced back to this one can which had been opened and set on the side of the ship, which had been opened one day and a half before using the second time.

Q. What regiment was that?

A. Sixth Illinois.

Q. When these boxes were opened and this meat issued, whom did you receipt for it?

A. I made my returns to the Commissary-General.

Q. Did Swift & Co. have anybody on board in charge of it?

A. They had a refrigerator engineer.

Q. That was all?

A. Yes, sir.

Q. What was he doing?

A. He was in charge of the meat, but under the direct control of the chief engineer of the ship.

Q. You only made your returns to the Commissary-General—you gave no receipt to him?

A. None whatever.

Q. So the meat while on board and under the care of Swift's man was under your charge?

A. Yes, sir. When I received it, I thought it was Government stores, and I knew nothing about the other until this board convened.

Q. What would one of the quarters weigh?

A. The weight was marked on each quarter—170, 175, or 180. They were all quarters of beef, just as good beef as ever went on board any ship, and it was in good wholesome condition as long as issued to any troops. The last issue on the *Massachusetts* was placed to the officers' mess.

By Captain HOWELL:

Q. Was that like the beef you buy in the cities here?

A. I think it was. I have had experience in business outside of my army experience in the meat business, and I never saw any better.

Q. And they would not take it at Porto Rico?

A. General Gilmore, I reported to him the arrival of this beef while I was on the reef, and he said, "We don't want it; we can get all the beef here we want." I made a report embodying those facts to the Commissary-General, and the statement was made to General Gilmore, and he has no recollection of ever knowing me or having seen me, which is very likely.

Q. But you did report to him?

A. Yes, sir.

Q. And that is the reason why that was not used?

A. That is my own private opinion. I did feel somewhat annoyed to feel that so large an amount of beef from my own country should be discarded for the bulls of Porto Rico. During the time I was at Ponce I was on shore nearly every day among different organizations of troops with whom I became acquainted, and they were complaining about the issue of fresh beef they had, and they said many times they received it before the flesh ceased to quiver and put it into their pots. One of the officers connected with one of the regiments down there—I don't remember his name now—but he said he had a great many cases of dysentery in his command, and he thought one of the reasons was on account of the meat being issued to his troops.

Q. This fresh meat that was killed there?

A. Yes, sir; killed there. One day I went to the commissary and I called up the question of meat with him again, and he said they had just received bids and were about closing the contract for the cattle to be delivered and slaughtered there, and I protested vigorously, and he said, "I have no orders to take your meat;" and I could not get rid of it.

By Dr. CONNER:

Q. Did you have an opportunity of inspecting the native cattle?

A. I saw some before they were slaughtered.

Q. You are familiar with the raising of cattle?

A. Yes, sir.

Q. Were those you saw in good condition?

A. They were not.

Q. In what respect were they not?

A. They were poor, and they had the appearance to me of those oxen they had used on the carts there, but whether they were or not I do not know.

Q. Were they large or small cattle?

A. Possibly cattle weighing 1,000 or 1,100 pounds.

Q. They would dress how much?

A. About 450.

Q. Did you have occasion to see the beef itself?

A. I saw some of it as it was being taken around in the early morning hours at Ponce.

Q. What was its condition?

A. Very red, and with very little fatty substance on it.

Q. From your experience in raising and selling and slaughtering cattle, would you consider it prime beef?

A. Not that I saw. There might have been better beef cattle, but this I saw was of inferior quality.

By Captain HOWELL:

Q. Do you consider the beef you saw there as good as the beef you had in your refrigerator?

A. No, sir.

WASHINGTON, D. C., January 17, 1899.

TESTIMONY OF COL. CHARLES H. GIBSON.

Col. CHARLES H. GIBSON appeared before the commission, was sworn, and testified as follows:

By General WILSON:

Q. Will you be kind enough, Colonel, to give us your full name, residence, and duty you have been performing in connection with the war with Spain in the Army?

A. Charles H. Gibson. My present residence is Santiago.

Q. You came from where?

A. My residence was in France before the war broke out, and I came over to go into the war—to offer my services.

Q. Under what circumstances did you go to Santiago, Colonel?

A. As commissioner for the National Relief Commission.

Q. The National Relief Commission has its headquarters where?

A. In the Drexel Building, in Philadelphia.

Q. Is that the one Dr. McCook is with?

A. Yes, sir.

Q. Will you kindly state for the benefit of the commission all you saw, and anything that may be of interest to us while you were representing the National Relief Commission at Santiago when you went there and the duty you performed?

A. I went there on the 19th of July on the United States supply ship *Resolute* with stores for the sick soldiers. I arrived at Guantanamo the 24th, and from there went to Santiago and reported to General Shafter with a letter from the Assistant Secretary of War, directing him to place all facilities at my disposal for the issue of these stores to the sick soldiers.

Q. These supplies were furnished by whom?

A. The National Relief Commission.

Q. And they consisted of what?

A. They consisted of food for the sick, malted milk, beef tea, biscuits, soups, and things of that kind.

Q. When the *Resolute* reached Santiago, what steps were taken?

A. I went to headquarters and handed my credentials to General Shafter and asked for facilities for landing my stores, as the *Resolute* had to return at once to Guantanamo, and the stores were transferred to the *Berkshire*, United States transport ship, and in four days I got them landed on the surf at the embarkadillo, the quartermaster and other stores. I found great confusion there; so great that it was with great difficulty that I succeeded in getting my stores out to take them to the Spanish warehouse to prevent them from being stolen by the Cubans, and a guard was placed over them. There was a great quantity of stores stolen at the embarkadillo, and I had to apply to General Wheeler for assistance to get these stores to the men, as I could get no assistance from General Shafter.

Q. Did you get the assistance from General Wheeler?

A. Yes, sir.

Q. And you had applied to General Shafter?

A. I had applied to General Shafter, and I got no assistance from him whatever.

Q. Did he decline?

A. He put me off. I was there alone and I could not leave my stores at the embarkadillo, and could not turn my back for fear of losing my stores by theft. I first applied to General Shafter for a horse, as I could not get my horse over, and I got none from him. I hired a horse in town and rode out to General Wheeler and told him exactly how I was situated—that I could not get any transportation,

and asked him to send some horses from my old regiment, the Second Cavalry, to use as pack horses to get the supplies out, and General Wheeler sent a hospital steward and got some wagons at Rudiez, and with those and with the wagons which I hired myself from the Cubans I managed to get out the stores.

Q. And they were taken where?

A. To the different divisions.

Q. In the front?

A. In the front.

Q. And were distributed?

A. Yes, sir.

Q. By you, or how?

A. I required the sergeants having any transportation means—I sent a telephone message to each sergeant of each division, and asked him to come and report to me, with transportation, what the number of sick of the division the day before was, and I told them I would issue the stores to them pro rata according to the number of sick, and expected them to divide them among the different regiments of their commands.

Q. And through the assistance of General Wheeler and the furnishing of the transportation, all the stores were distributed to the troops—to the sick and wounded?

A. Yes, sir.

Q. While engaged in this good work, which was under your charge, did you at any time use or have anything to do with the rations issued to the troops there?

A. Yes, sir.

Q. Will you tell us anything you may know on that subject?

A. Well, what I paid particular attention to—I went to Dr. Havard at one time, and asked him in regard to the beef issued to the men—that is, the tinned beef—as I could not eat it myself. I could not swallow it. It was a beef that was more like string and ropes than anything else when you opened the can, and it was utterly impossible for me to swallow it. I tried again and again to chew and swallow it, but I could not do it. I asked if that was the beef given to the convalescents, and said if it was it was utterly improper.

Q. What is that beef generally known as in a commercial way?

A. Canned roast beef. The only tinned thing I could eat at all was the breakfast bacon, which was very good; but that was not a very good thing to give to sick men.

Q. Did you ever use or issue any refrigerated beef?

A. I did once.

Q. Where was that?

A. I bought that for myself for my own mess. I had a mess with Colonel Borup and Colonel Starr; and when we were living at the Venus restaurant I sent to a commissary and got this beef, and it came up green. I went down myself—I sent my orderly down first and then went down myself—and saw the sergeant and spoke to him about the meat, and he said that that did not affect the quality of the meat at all; that I had sent down late that day and had probably gotten a forequarter, and he said the hindquarters of the beef were the best. They were all hung up in a refrigerator compartment, and the forequarters were usually lying on the floor, and they got this green mold on them. He said that could be scraped off and the beef would be all right. I tried it a second time and the meat was bad. I imagine it was due to the fact that it was several hours exposed to the air. The meat commenced to be issued at 4 o'clock in the morning, and it was taken off the boat and put in that open air in an old warehouse—shed, rather—on the Marina and there issued, and in a half hour's time it was covered with flies, and in two or three hours the meat was a perfect fly nest.

Q. In your remark that "the meat was green," please state exactly what idea you mean to convey to us—green on the outside?

A. Outside. The sergeant told me that could be scraped off and the meat would be sweet.

By Governor WOODBURY:

Q. Will you kindly ascertain what date that was, and whether there was a refrigerator on shore?

A. That was the first arrival of the beef issued by Swift & Co. in August.

By General WILSON:

Q. You can not recall the date?

A. It was the latter end of August. It was a couple of days after Shafter left, which was on the 28th of August. It must have been the end of the month.

Q. Did you use any beef yourself?

A. Only two times.

Q. That is all you got. Did you eat any of that?

A. No, sir; I tasted it. I had seen it and probably that prejudiced me against it.

By Governor WOODBURY:

Q. Was any refrigerating plant on shore at that time?

A. No, sir.

By General WILSON:

Q. Do you know any reason, or did you hear or assume, or can you give any light in any way as to whether that refrigerated beef had been subjected to any chemical treatment whatever?

A. I never heard any intimation of that kind.

Q. Did you imagine, in your own mind, at that time of such a thing?

A. No, sir; I did not. I naturally supposed it was beef taken out of the refrigerator and exposed two or three hours in the broiling sun in Santiago, and it would be spoiled.

Q. Is there anything you can give us that will help us in the problem we have before us—in connection with the food or army generally? If so, it will gratify us. As a soldier, your experience would teach you a good deal that would help us out.

A. That's a general question. I would have to go back to some things.

Q. I don't mean to give your entire experience, but anything that would be of interest to us.

A. There were a great many things that occurred down there that I had considerable objection to at the time.

By Captain HOWELL:

Q. Did you have any opportunity to get any native beef there?

A. No, sir.

Q. Did you see any there?

A. No, sir.

Q. Was any issued to the army?

A. No, sir.

Q. Any in the markets at all?

A. There was beef that came into the Cuban market, but the Cuban beef—you could get small quantities there, which was very bad and tough. I never tried any of it. The cattle which were left by the Spaniards were very much run down.

Q. Did you hear any officers of the army complain of the quality of the beef with which the army was furnished there?

A. Refrigerated beef?

Q. Yes, sir.

A. No, sir.

Q. They had no other beef but this refrigerated beef and the canned beef?

A. None there. As a general thing we dropped the beef.

Q. You say "we." Who do you mean by "we?"

A. All the officers I came in contact with, that I joined with in the cafés, restaurants, or in my own mess; we dropped it altogether.

Q. Did they?

A. As a general thing, they did.

Q. And yet they didn't make any comment on it—on the quality?

A. No, sir. The beef that we got—we had some beef sent down care of Major Bartlett—came there sent on the hoof; but that beef was killed and issued at once, and had to be cooked at once to keep from spoiling, and naturally it was tough beef.

Q. Do you think that was worse than refrigerated beef?

A. Well, it would be to me. Of course I don't care about eating tough meat. Refrigerated beef I did not eat from the natural feeling of repugnance—seeing the flies in the commissary shed and with that green mold on it.

By Governor WOODBURY:

Q. Did you see any of that beef after they established a refrigerating plant on shore?

A. No, sir; I took my meals at the café.

By Captain HOWELL:

Q. You did not hear any objection from the officers or soldiers about that beef?

A. The only remarks I heard was in regard to that green mold.

Q. Nothing about the quality?

A. No, sir.

By General McCook:

Q. You spoke about canned beef; how should that canned roast beef be eaten?

A. I don't think it should be eaten at all.

Q. Did you ever try it cooked; did you ever try to make a hash out of it and cooked with vegetables?

A. No, sir; the vegetables we had were very scarce.

Q. Did you eat the meat raw?

A. No; I had it warmed up by my cook, but it was utterly tasteless and it was just like eating stringy meat. It looked like meat that had been boiled and had all the essence taken out to make soup and boiled to death.

Q. Did you season it properly?

A. Yes, sir; it was utterly impossible for me to eat it. I could not swallow it, and I tried it over and over again and chewed it, but could not eat it.

By General DODGE:

Q. Have you seen any of this canned meat abroad?

A. Yes, sir:

Q. Have you ever tested it there?

A. My attention was called to it in France by a decree of the French Government forbidding the use of it to the French soldiers. I saw Mr. Hennecke, minister of foreign affairs, and I said, "If you are going to treat us with our beef that way I will have my revenge on you and show how you send adulterated wine to us, and expose them." I wrote a series of letters, which were published in the Public Ledger, on the wines of France.

By Colonel DENBY:

Q. Were you a consul or in any official position?

A. No, sir. I then was visited by the deputy, who spoke to me about these letters as they came back and had been translated into French. He said, "I would be invited to leave the country if I pitched into French wines, and I made a parody on the soldier of the legion," and sent it to him—about the soldier of the legion who was dying in Algeria asking for American beef without French wine, and then he came to me and saw me and said his son or nephew was in the French army and he had some of this meat and they could not eat it, and he said the general reports are that the American canned meat had been condemned, and that an order had been issued forbidding its use in the army.

By Captain HOWELL:

Q. How long since was that?

A. Over three years.

Q. They are buying a great deal of it now. One of our witnesses said they sold them 25,000,000 pounds.

A. It is not used in the French army, unless that order has been revoked since I left there—a year ago. That order existed at one time regarding American meats in France.

By General McCook:

Q. Was the beef that you opened there a "sweller" [pause]; do you know what a "sweller" is?

A. Yes, sir.

By Dr. CONNER:

Q. Did you have occasion to observe things in Porto Rico?

A. No, sir; I did not go to Porto Rico; I have been in Santiago all the time.

By General McCook:

Q. A witness testified as follows: "We have been selling our roast beef to the French Government for the last few years—25,000,000 pounds, probably—the same beef we have sold to the United States?"

A. I know for a fact that that order was issued, and I got my information from Mr. Eustis, the ambassador there, and I commenced my letter writing, as I said I would do.

Q. This roast beef is only cooked twenty minutes, simply to preserve it, to keep it in the can. It is not intended to be eaten raw?

A. It looked to me when it was opened as if all the essence had been cooked out of it before it was put in the can. Every can I had opened came out in those shreds. It would all shred out.

Q. How many cans did you open?

A. Forty or fifty. I bought a lot of them for my own mess and I could never eat it. I tried to eat it day after day and could not.

By General DODGE:

Q. It was not spoiled?

A. No; it was not spoiled. The reason we did not make hash of it was because we could not get potatoes but about once a week.

Q. Any other suggestions you have to make, Colonel?

A. No, sir; I don't think of anything at present. There are a good many things I know of down there that I don't think is necessary to bring before the commission.

WASHINGTON, D. C., *January 20, 1899.***TESTIMONY OF DR. WILLIAM H. DALY.**

Dr. WILLIAM H. DALY was duly sworn.

By General BEAVER:

Q. Doctor, will you kindly give us your full name and address?

A. William Hudson Daly; my office address is 516 Market street, Pittsburg, Pa.

Q. Have you at any time been in the military service of the United States? If so, when and for what length of time?

A. I was in the military service of the United States during the war of the rebellion and also during the recent Spanish war.

Q. When were you appointed during the recent Spanish war, and for what length of time did you serve?

A. I think my commission, sir, is dated about the 28th of May and my resignation was accepted to take effect on the 18th of this month.

Q. Where and in what capacity did you serve?

A. In the war of the rebellion, I served as a medical cadet for some time and afterwards I was promoted and served as acting assistant surgeon to the close of the rebellion. In the late Spanish war my rank was that of major and chief surgeon of United States Volunteers.

Q. Where did you serve during the last war?

A. My service extended over an area from Tampa to Porto Rico, with various details at different places and of varied character. My service began at Tampa and ended in a tour of inspection at Jacksonville, Chickamauga, and Lexington, Ky.

Q. Was your service that of a staff officer, or as an administrative officer?

A. My assignment to duty, I believe, read that I was "assigned to special duty on the staff of the Commanding General of the Army." I was, consequently, a staff officer.

Q. And your service was rendered in accordance with your assignment?

A. Yes.

Q. Were you at the headquarters of the Major-General Commanding the Army during your entire service?

A. I was detached occasionally, sir, for different lines of special duty, but I believe I was always considered a member of General Miles's staff.

Q. Had you served with General Miles previously, during the war of the rebellion?

A. No.

Q. Had you known him previously?

A. Yes.

Q. When did your active service with the Army cease—you say your resignation was accepted to take effect as of the 18th of the present month?

A. My active service ceased, sir, as near as I can remember, about the 18th of October. I had been very ill during the last month or six weeks of my active service with malarial fever, but kept on with my duties until I arrived at Lexington, where I was taken with what I supposed an additional severe chill, but which I found was an attack of the grip, which caused me to ask for leave of absence.

Q. And that leave began on the 18th of October?

A. I think it began on the 18th of October.

Q. How long were you at Tampa, Doctor, and between what dates?

A. As near as I can remember, I was at Tampa from about the 1st of June until about the second or third day after the Shafter expedition sailed.

Q. You were there, then, during the time that the Shafter expedition was being prepared for its Cuban service?

A. Yes.

Q. You made a report, Doctor, which has been submitted to us, dated the 21st of September, 1898, to the Adjutant-General at headquarters of the Army in regard to the beef furnished to the Army at different times. We have a copy of it, and it has been copied several times—I wish you would read that over and state whether it is the report you made, as it purports to be.

(Witness reads paper, and remarks: "I don't believe I ever spelled salicylic acid that way.")

Q. I think you may find several things—after a paper has been copied several times, it may get a good deal astray.

A. Without being able to say from memory that every word is correct here—however, there is one thing, the typewriter has made a mistake which should be corrected, viz, the date should be October 21 instead of September 21, 1898. The substance of the report is genuine. I dictated it and I am willing to stand by it. I can not say from this hasty glance, however, whether every word as typewritten is correct or not.

Q. Then, September 21 should be October 21?

A. Yes.

Q. Then, this report was made subsequent to your leave of absence and after your active service with the Army ceased?

A. It was dictated to my private stenographer about the time I asked for a sick leave of absence, and it was sent forward about the 21st of October, 1898.

By Colonel DENBY:

Q. About what time?

A. It was dictated about the time I asked for sick leave of absence.

By General BEAVER:

Q. Was this report made voluntarily or called for by request or in obedience to a circular or letter of anyone?

A. I feel sure that no one knew of the report. I don't remember to have spoken to anybody about intending to make a report. If I did, I don't remember.

Q. Are you aware of a circular issued by the Major-General Commanding the Army upon that general subject?

A. I never saw one, sir, up to the time that report was dictated. I may have seen something since in the newspapers.

Q. Had you heard of such a circular up to that time?

A. No; I had not heard of one.

Q. Had you any information leading you to believe that such a circular was to be issued?

A. No, I had not; but I thought I had information enough to believe that such a circular should be issued.

Q. And it was under contemplation?

A. No; I had no such information.

Q. If it had been issued prior to this report, you had no knowledge of it, either directly or indirectly?

A. None that I remember.

Q. Had you any conversation with any of the officers of the Army in regard to this general subject?

A. I am under the impression, sir, that at Ponce I orally communicated some of my observations to the Commanding General of the Army. I am not sure, but I am under that impression, and pretty strongly under that impression.

Q. About what date was that, Doctor?

A. Well, sir, as near as I can remember, I think it was while I had charge of the organization of the sanitary arrangements of the Spanish hospital at Ponce. I was placed in charge there temporarily to organize that hospital and get it in working order, which I proceeded to do, and then turned it over to Major Birmingham. It was during that time, sir, I think.

Q. How long were you on that detached service?

A. My duty was nearly always on detached service; here to-day and there to-morrow, and anywhere that my services were required. I might be investigating to-day the sources of water supply; the next day I might be inspecting a camp or selecting sites for military field hospitals, and the next day with the medical department of some regiment to ascertain if they had everything needed. My duties were varied from day to day, and in this instance I was ordered to take charge of the Spanish military hospital at Ponce, correct its bad sanitary condition, and organize it as a base hospital for the army of invasion. I am under the impression, sir, that that was about—I can not tell you the date—but this service immediately preceded the service of Major Birmingham in charge.

By Colonel DENBY:

Q. What month, Doctor?

A. That was in, I think, the latter part of July [consults memorandum of dates]. I can give it to you now. It was somewhere in the early part of August, between the 1st and 10th or 12th of August.

Q. This report, then, was not suggested to you by anyone; it was made of your own motion?

A. I assure you it was, sir.

Q. You speak, Doctor, of having seen at the headquarters of the army at Tampa at the time of the embarkation of the Shafter expedition a quarter of beef shown to you by Colonel Weston; did he inform you at the time that he showed it to you that it was what is known as "processed" beef?

A. No; I can't say that, for I don't remember the words of Colonel Weston. As near as I can remember, he made a remark like this: "Here is a quarter of beef we have hanging up here and we are going to see what it will do." Then he said it had been hanging there sixty hours, and we went over and inspected it together. My interest was at once awakened in a quarter of slaughtered beef that could stand in a moist and warm atmosphere like Tampa so long as sixty hours without being putrid. We had some further conversation about it. What the further exact words of the conversation were I can not remember, but the general impression was left upon my mind, yet I can not say it was by so many words, that it was part of the beef from the cargo in the hold of the transport. Do not understand me as saying Colonel Weston told me so, because I can not say that. Yet such impression was left upon my mind by whatever conversation we had together.

Q. Did he tell you that it was a process claimed to be invented by one Powell?

A. No, sir; he did not. Neither Powell's nor any other person's name was mentioned.

Q. So you did not know at the time you saw it that it was an experiment carried on by Colonel Weston at the request of one Powell, and that it was prepared in Chicago and shipped there by that party with the expectation of having it adopted by the Army?

A. I know nothing of that, excepting it seemed to me to be an experiment, and interested me—so much so that I went back two or three times onto the bridge of the transport, and I took so much interest that with my knife I cut a piece from the end of the loin, took a large envelope out of my pocket, dropped the meat into it, and put it into my pocket with the intention of investigating its qualities—to try it, taste it, and eat it.

Q. Do you remember the name of the transport you went on?

A. No; I can not say.

Q. What was the position of the beef when you saw it hanging up in the sun?

A. It was hanging up on the bridge, near the observation place for the captain, free in the sun. I observed a thing that seemed curious to me at the time; that is, that the flies, especially the blow flies, got away from it quickly, and whenever they did light on it they would not remain on it, although they were over our hands and faces; but that did not arouse my suspicion at the time.

Q. Did you see the other officers examine it?

A. No; I did not observe any. I was back two or three times during the day. I did not observe any other officers examine it.

Q. Did you observe more than this one quarter, or was it a quarter?

A. It was a hind quarter. I saw a good deal more beef there being loaded onto the transports.

Q. It was similar to any other piece?

A. That I can not say; but I saw this piece, however, several times, and naturally drifted to it, with the interest it had awakened, as it seemed then like a good thing.

Q. What was done with the sample you took from that, Doctor?

A. The following day I was ordered to follow up personally an order from General Coppinger to the city authorities of Tampa to clean up the town, which was in a very bad sanitary condition. The object was to awaken active interest in the work by the city authorities. I was en route at the horse corral, attending to some of the corral men who had been injured by vicious horses, and was also obtaining a corral horse to ride, and while they were lassoing my horse I took the piece of beef out of my pocket, sharpened a stick, and cooked it before a fire and ate it. It did not smell natural when I was cooking it, but it did not arouse any suspicion that anything was wrong. It did not taste good when I ate it. I was very busy after eating it, and afterwards went over into the corral, selected a big strong horse, and helped the men lasso him out of the four or five hundred there, put a saddle and bridle on him, and started over toward Tampa Heights, some 5 or more miles. The horse proved to be wild and unruly and threw himself once or twice. In the heat of the day and struggle with the horse I got ill with a burning in my stomach, nausea and vomiting, which I first attributed to my exertion and activity in the sun; but when I vomited there was a taste in my mouth that recalled an experience of some years before which I had long forgotten. It was an experience with some chemically prepared antelope and elk meat.

Q. Where did you have that experience?

A. In the Rocky Mountains, on a hunting trip several years before. The memory of it recurred to me by a taste left on my palate by this beef I had eaten shortly before. It was an experience and taste similar—quite so—and I experienced it all that day and some of the next day. However, it made no very great impression upon me, excepting it awakened an additional interest and attention in the matter. After getting to Ponce I had various details and tours of duty, sometimes being sent out to inspect sites for division hospitals or to go here or there on whatever service I was ordered to do. I stopped one day at the foot of the mountains on a stream where there was a post of pickets thrown out. They objected to me passing outside our lines, and they had just captured a Spanish prisoner. They consulted me as to his disposal, and I directed them to send him to General Ernst's headquarters. I then noticed some of them cooking beef on sharp-pointed sticks at a fire. I tasted some of it, and again immediately the recollection of the disagreeable taste of former years recurred to me. I did not swallow any of it, however. Subsequently, whenever I would go by a camp where they were cooking beef I would stop and taste it, frequently getting the peculiar

taste. At the camp of the ambulance corps, which I visited pretty often in the line of duty, I tasted the beef quite often. It had a pretty good appearance, and the natural colors of the meat were often exaggerated, but the taste not right. At the camp of the pack-mule train at different times I tasted the beef, and at the camps of the regiments, wherever I found it convenient, I would taste of the meat. When I was in charge of the Spanish hospital I made observations also, with the taste recurring of my former experiences. In partaking of the antelope and elk meat I was made very ill, and the observations made at the Spanish hospital and other places in Porto Rico brought back repeatedly the recollection of the taste, and always more or less markedly of this marked taste and the insipidity and disappointment that beef looking so well would be so unpalatable and lack so much of the naturally delicious taste of beef properly cared for in refrigerators, which it is well known to have. Then came the experience on the *Panama*.

Q. I don't want to get away from this. We will come to the *Panama* afterwards. I want to follow up this Tampa experience. Do you know that anybody else ate any of this quarter you were shown except yourself?

A. No; I do not, sir.

Q. Did you hear at the time from Colonel Weston, or anyone else, that he declined to accept Mr. Powell's services to cure the beef to be sent to Cuba, and preferred to take it as it came regularly in the refrigerators?

A. No.

Q. If it was a fact, you were not familiar with it then and have not become familiar with it since?

A. I think I have seen some statements since in the papers of that kind.

Q. And you know of only that single quarter of beef hanging on the bridge of this vessel, and put there for the purpose of exposing it to the sun, to see how long it would remain apparently good?

A. I would not like to say that I know only of that.

Q. Did you make any other observations?

A. I made some other observations at Tampa.

Q. What were they?

A. It was nothing that would add to what I have said.

Q. Kindly give us, Doctor, the observations which you made at Tampa, in addition to what you have already remarked as to this single quarter of beef which was exposed to the sun.

A. Well, sir, I don't think they signified any others of interest.

Q. From the taste which you had of this beef, and from your knowledge and experience, how would you say it was treated?

A. I would be led, possibly, somewhat by my former experience. The antelope and elk meat was treated by a mixture of boric and salicylic acid, and when the recollection came to me—a long forgotten recollection—I naturally remembered that, as the taste was the same and the effect upon me the same, and thought the chemicals used were probably the same.

Q. Had you treated the elk and antelope yourself?

A. I assisted, sir.

Q. You regarded that as harmless so far as your health was concerned, but simply tending to make it unpalatable.

A. I had used this preparation and thought it entirely harmless, because a person in whom I had confidence had used it and said it was all right.

Q. This preservation, or attempted preservation, of the elk and antelope was made by you on a hunting expedition?

A. Yes.

Q. Where was that?

A. In the Rocky Mountains.

Q. When?

A. I don't remember—a few years ago—six or seven years.

Q. Did you have a party?

A. I had a friend—a guide.

Q. Who suggested the preservation of the meat by this process?

A. It occurred this way, sir. In purchasing some supplies in Chicago a man whom I had dealt with for several years in purchasing supplies for my annual Western trip told me there was a thing he had used which had given satisfaction, and he said he had preserved wild turkeys by drawing them and putting the powder on the insides and under the wings, etc., and I had already conceived in my mind a plan to be used, but he assured me he had used this for one or two years, and he supplied me with a couple of boxes of it, probably a quantity in bulk equal to the size of six bricks. It was in a powder. And that is the history of the way I got it. I brought the rest of it home, and I think some of the powder was around my house for a year or two, and some of it I used since for preserving the heads of animals to send them to the taxidermist.

Q. Externally or internally?

A. Externally, and rubbed into the raw flesh, and also I made a solution and injected it with my hypodermic syringe. I analyzed it a number of times afterwards and found it contained boric acid and salicylic acid. Those two chemicals I found.

Q. What are those acids, Doctor?

A. Boric acid is an oxide of boron. In ancient times it was obtained from the waters of the volcanic lagoons in Italy. It is now found in South America and also on the Plains and the Pacific slope. I think it is found in the form of borate of lime, and the boric acid is set free by the use of sulphuric acid acting upon it.

Q. Then the combination is sulphuric acid?

A. No; sulphuric acid is used to liberate the boric acid from the borate of lime.

Q. What is the effect on the human system?

A. It is not a remedy used internally at all. I did a few years ago use the biborate of soda in certain ailments, but the remedy proved more dangerous than the disease. Of its use in foods, the effect would be to destroy digestion and create nausea and debility. It is not safe to use in foods at all or in any sense, and it is not a proper medicine to be used internally.

Q. What is the base of salicylic acid?

A. I think at first salicylic acid was made largely from benzine. It is now, I believe, made from crude carbolic acid. It can also be made from *Gaultheria*, but that is very expensive—too expensive to be used in a commercial way. The common salicylic acid made from carbolic acid is a cheap article of commerce.

Q. What is the result of the combination of the two acids?

A. To tell of the possible reactions of the two acids as used in preserving beef would necessitate a large amount of detail. What you want to get at is the effect of this combination on the health of the human being consuming it in foods, is it not?

Q. Yes, sir.

A. The effect of salicylic acid upon the human system in foods is bad. I don't think there is a man present who, if he were required to take salicylic acid or salicylate of sodium for rheumatism in powder or solution uncombined for forty-eight hours would take it voluntarily or unless a pistol was held at his head. It has a mawkish, loathsome, disgusting taste, and nearly always destroys digestion. It nearly always creates a depression of vitality that is very difficult to prevent or overcome.

Q. Then the presence of that acid would make itself known very quickly if it were used in the preservation of beef or any food?

A. Depending, of course, upon the quantity used.

Q. But the tendency would be—

A. But it also ought to be remembered that those two acids are so potent as preservatives of beef that not very much is required.

Q. Now, have you any further knowledge as to the final destination of this quarter of beef that you saw at Tampa?

A. None.

Q. You don't know whether it was issued to the troops or thrown away?

A. No, sir; but I would be perfectly willing to take Colonel Weston's word, having a high opinion of him.

Q. He says it was not used. It was turned down because they would not take anything that was chemically prepared.

A. Yes.

Q. Now, as to what you saw at Porto Rico: First, as to the picket post; do you know where the beef that the men were using came from?

A. No, sir; I know this, that it was not native beef.

Q. Do you know how far it was from the coast?

A. The picket lines, at the outposts of the army, were on a stream just at the foot of the mountains. The distance was only a few miles from the coast.

Q. Do you know how long that beef had been issued to the troops before it was used?

A. No.

Q. You made no investigation then in regard to the matter, except the practical one of trying to eat some of it?

A. I had not the time. I had plenty to keep me busy otherwise.

Q. As to any other investigations which you made in Porto Rico or Cuba, did you follow any of the beef which you saw at any time, and which you suspected to be chemically treated, to the source of supply, and find where it came from, and how long it had been issued, and what—and all the questions which naturally arise in the mind as to the issue and use of beef under those circumstances?

A. You will please remember I was not making an investigation; I was making observations. The only thing I could say was that these observations were not made upon the so-called refrigerated beef. I did not have the time or opportunity to follow them up; other pressing duties prevented me.

Q. You had no knowledge of whether it was refrigerated beef or not?

A. Oh, yes; I have. There is no mistaking the refrigerated beef from the native beef. A person can tell it at a glance.

Q. But as to the length of time it had been out of the refrigerator you know nothing?

A. No.

Q. Had you seen it before its preparation to observe whether it had the peculiar odor or peculiar appearance of fresh beef when exposed to the Southern climate? Had it the beard, or fringe, some people call it, that unavoidably comes from exposure?

A. No, sir. One place I saw that most markedly was one day I had been ordered to attend professionally some sick officers on various transport ships in the offing at Ponce. I don't remember the date, and I am not sure that I could tell you the transport. The small boat I had was manned by natives who could not speak English, and I spoke little Spanish. I got onto a transport where a soldier-butcher, stripped to the waist, with some assistants, was bringing up quarters of beef from the hold below. He was running his bared arm in the quarters of putrid beef to find solid parts. Any solid piece he could find was cut out and pickled in some barrels at hand. It was very offensive work, and I went on about my business. That was one instance until we got onto the *Panama*. There were instances when I inspected the beef on the dock, when beef arrived

off the transports in lighters, when I would tear open the sacks and found some of it repulsive, and I nearly always found the peculiarly repulsive odor—the odor which I endeavored to typify in my report without aiming to give offense to anybody. I simply tried to use plain language, which would be understood.

Q. The odor which you remembered from the sickening experience you had?

A. No. I described it as the “odor from a dead human body preserved with chemicals,” as the best illustration I could give.

Q. Then it did not recall the experience you had with eating the chemically prepared antelope and elk meat?

A. I adverted to that as to its taste, sir.

Q. Give us, if you can, the name of the transport on which this happened, and, if possible, the name of the transport upon which this beef had been transported from the United States to Porto Rico.

A. Which beef do you refer to?

Q. Where you saw the man examining it for the solid parts.

A. I would not like to be positive about that, sir, but I am under the impression it was the *City of Chester*.

Q. You were there inspecting the sanitary conditions?

A. I was there, as I say, seeking sick officers that I was ordered to look after professionally.

Q. Was this meat brought from the refrigerator?

A. They brought it from some part of the ship; I don't know where.

Q. You don't know whether this was on the refrigerating ship or not, or whether it had been transferred?

A. I am under the impression it was brought from the so-called refrigerator on that ship.

Q. It was spoiled meat, the most of it?

A. I should say so.

Q. Then not chemically prepared, or it would not have spoiled?

A. I can not tell you, excepting that the beef was tainted and putrid.

Q. The chemicals would have preserved it, would they not?

A. I should think so; yet I am pretty sure there were chemicals involved in the beef we had on the *Panama*, and that was not successfully preserved.

Q. Then the attempt to preserve with chemicals is not a success?

A. I should say not, only within certain limits.

Q. Have you any knowledge or experience with chemically prepared beef being also preserved in refrigerators—is that the way in which it is preserved?

A. I really could not tell you, sir, but I presume from my observation that the requirements of the Government were unreasonable.

Q. Do you know that they were?

A. I understand that they were that it should keep seventy-two hours after leaving the refrigerators.

Q. Under what circumstances?

A. I presume under the circumstances of an invading army.

Q. It might be well to know, Doctor, what the contract is. There is no contract for the beef to be preserved seventy-two hours outside of the refrigerator?

A. I should think it would be a very curious thing. I presume that if these chemicals were used they were used to tide that period over, which even then is impossible in the nature of things.

Q. As I recollect the contract, the meat is to be preserved seventy-two hours out of the refrigerator on the ship after its transfer to the refrigerator on shore, and then it is to keep twenty-four hours after transfer from the refrigerator on shore to the care of the army.

A. All experience, tradition, and common sense teach that beef which has been in a cold, dry atmosphere for a certain time will yield to germs of putrescence.

immediately after much more rapidly than beef preserved merely in a warm, dry air, and everyone knows, I think, who has had experience with preserving beef, that moisture and warmth are its two great enemies and the two great favoring elements of putrescence, and that twenty or twenty-four hours will try it very much, especially where blowflies infest it, for they not only deposit a larva, but also a germ that hastens its putrefaction, just as the ants of South America deposit on a dead animal the germs which hasten putrescence, because they like it that way, and they are great scavengers.

Q. "The beef is to be properly clothed by the party of the second part for its protection and proper handling—that is, covered with a cloth and so preserved by the refrigeration on shipboard and at the refrigerating building referred to in article second hereto (that is, on shore)—so that it shall be perfectly good and fit for use seventy-two hours after being issued from the ship's refrigerators or twenty-four hours after being issued from the refrigerating building to the proper officers of the Government." That is, to be good twenty-four hours after passing into the hands of the officers.

A. I would consider that a very extreme limit, even then, especially with an invading army, in heat, moisture, rain, etc. It is very severe on beef.

Q. Twenty-four hours after leaving the refrigerator?

A. Yes; that time is an extreme limit of endurance.

Q. Therefore, if the troops declined to give it attention, or hauled it in open wagons, or tore the cloth off, or exposed it to the atmosphere, the conditions surrounding it there and the climatic conditions, the condition of the beef when it got to the troops finally would be very bad, would it?

A. I should say so.

Q. To what extent do you think they would be compelled to cut it away so that they could use it at all?

A. It would be difficult for me to say. It would depend upon the different conditions the different pieces of meat were subjected to.

Q. Did you follow that out, Doctor?

A. I had not the time; I was kept too busy otherwise.

Q. So, then, your report was based upon superficial observation without close examination and without any effort at analysis?

A. No; I would not like to say that. I made an analysis of a solution from the meat on the *Panama*.

Q. We will come to that presently; but as to the others. You made no effort at following the meat, as to where it came from, etc.?

A. No, sir. I said I had not the time, no matter how much I was disposed to do so. I passed frequently within half a mile of the camps of friends in the army, yet hadn't time to go to see them even.

Q. Coming to the *Panama*, Doctor; from whom did you receive the beef that was taken on to the *Panama* for the use of the convalescents coming to the United States?

A. Capt. R. J. C. Irvine, of the Eleventh Infantry, was assigned to me for duty. I appointed him commissary of the ship, of which I had charge, and there seemed to be a good deal of difficulty in our getting beef. We talked the matter over, and I advised that he get the best beef he could. I think, before we went from Ponce to Arroyo to get the allotment of convalescents there we got a little beef on board, but only a little, because we found it impossible to get ice, for certain reasons, and when we returned from Arroyo to Ponce we had the same difficulty. However, we then got about 2,000 pounds of beef at Ponce, and simultaneously with the getting of that beef we got a ton and a half of ice. We had a ton and a half of ice to preserve a ton of beef. We sailed during the night from Ponce to Mayaguez, and early the next morning we got 10 tons more ice on board. We then had 11½ tons of ice to preserve 1 ton of beef. The beef was obtained at the

commissary at Ponce. When it came aboard it had a peculiar odor, but being in the open air it did not strike one so forcibly as it did after we put it in the ice room. The ice room was partitioned off on the left side of the forward hold of the ship, and was about 18 feet square, reaching from the ceiling to the floor, probably 7 or 8 feet high—a pretty well constructed ice room. After the beef and ice were in we soon discovered that the beef was very offensive.

Q. Did you lay the beef on the ice?

A. Yes; it was properly placed.

Q. I would not consider that the proper way.

A. Well, theoretically you are right—I mean by putting the ice above it—but as a matter of practice it is nearly always done the other way, and it is a good way, too. Later on we had the meat and ice mixed. You can have your choice, either above or below. But this hold alongside of the ice room that I speak of contained 150, more or less, of swinging canvas hammocks, in which I had convalescents. Whenever the butchers opened this ice room there would be a great outcry on the part of the patients about the horrible stench, and it was horrible, and there was a good deal of discussion about it at officers' call in the morning. I wanted to hear what was said. I tried to dissuade the soldiers that there was anything wrong with it, but it was impossible; and my conscience and judgment told me there was much wrong. It had the familiar taste and smell I spoke of. The day before we had the board of survey, and the meat was thrown overboard, I took a quart measure of the beef tea, before any seasoning was put in, from one of the large caldrons on the deck of the vessel that the soup or stews were made in, and after filtering it once or twice through absorbent cotton, so as to free it from fat, put it in a couple of empty aerated water bottles that had had nothing but aerated water in them, and put the bottles in my portmanteau and kept it under lock and key. Occasionally I would inspect it and taste it. However, after landing the patients at Fortress Monroe and reaching Pittsburg, seven or eight days after taking this sample, I there filtered this again carefully and put it on ice and freed it from all the fat possible; then I evaporated the fluid. I got a lightish-brown residuum, which I triturated, and obtained the characteristic flame of boric acid under the blowpipe and also in the flame of alcohol. I also obtained the delicate violet tint of salicylic acid in the presence of ferric chloride. Now, I have a little of that powder here, if the gentlemen desire to taste it and see the tests. I want the commission to see that I did not jump at conclusions, and say that one swallow made a summer. My duties were so varied I did not have time to follow up the various lines; in fact, it did not occur to me that it was my duty to make a case, and it does not occur to me now. It is the duty of the Government to make a case by investigating the sources of supply in accordance with my recommendations.

(The proposition to taste and test was ignored.)

Q. And you are just one element in the making of a case. We are trying to make out a case.

A. Yes.

Q. Now, did Captain Irvine secure this beef for the Panama or did you?

A. Captain Irvine, as my commissary.

Q. Where did he secure it?

A. At the commissary in Ponce.

Q. Do you know who was the officer in charge of the commissary at Ponce?

A. I don't remember his name, sir.

Q. It would be the depot commissary at Ponce?

A. I can not answer that, sir. I left that to Captain Irvine. We condemned 1,500 pounds. We estimated that. We could not use the beef but one or two days.

By Captain HOWELL:

Q. You had a board of survey?

A. Yes, sir; we did it under Army regulations.

Q. They say 900 pounds was condemned, don't they?

A. Oh, no, sir; 1,500 pounds.

Q. The board says 900 pounds, and that was what the account was settled by.

A. I think you will find the papers in the Commissary-General's Office.

General DODGE. It was 963 pounds.

The WITNESS. That is a mistake. I filed the papers with the Commissary-General when I made my report here.

Q. [Reads from receipts.] "Captain Irvine received from Captain Pomroy 539 and 1,200 pounds," which makes 1,739 pounds of beef. We have the receipts or invoices of the beef transferred by Captain Pomroy, the depot commissary, to Captain Irvine. What was the date, Doctor, on which you went upon the *Panama*?

A. The date of my detail, I think, was about the 1st of September, earlier or later, but I was some time in directing her preparation. She was very filthy, and I remember the date of this action of the board of survey was on the 7th.

By General DODGE:

Q. The 8th?

A. Pardon me for being positive, because I was there.

Q. You are privileged to be positive.

A. While I am aware that there is nothing sure but death and taxes, I am also pretty sure of this: We got this beef on board on the 4th, were at Mayaguez on the 5th, the board was organized on the 6th, and the beef thrown overboard on the 7th, and the action of the board was upon 1,500 pounds of beef.

Q. That is more than they had, Doctor.

A. I don't think you would say so if you saw it or smelt it.

Q. They could not have had it; on the 4th they had 539 pounds.

A. I advised my commissary to get as little as possible before we left Ponce on the 3d for Arroyo, because there was not a pound of ice on board.

Q. Then, on the 13th of September, you got 1,250 pounds, and it was the residue of a part of that upon which the board of survey sat, because you did not have that amount to start with?

A. Not so. Have you got a copy of my report there? Let me see it.

Q. I don't know as to that. We have the invoice from Captain Pomroy to Captain Irvine.

A. I think it would be only right to have a copy here of my report which I made to the Commissary-General.

Q. The Doctor does not mean the report of the board, but his report when sending the report of the board?

A. The report of the board is what I want to see.

Q. Was the question, Doctor, as to the condition of this beef, or the condition precedent which was responsible for its condition at the time it was destroyed discussed by the board or examined into in any way?

A. I believe, sir, that they regarded the beef as tainted and unfit for use. The investigations I speak of were my own. I don't think I discussed that matter with the board. The fact is, I did not have time.

Q. Now, in the preserving of that beef after you received it from Captain Pomroy, as I understand you, it was placed in the ice room upon the ice?

A. Yes, sir; but the following morning there was 11½ tons of ice put onto it and about it.

Q. So it came in immediate contact with the ice?

A. Yes.

Q. Have you any knowledge, Doctor, as to the result of treatment of that kind upon beef which has been preserved in a refrigerator where the ammonia process is used?

A. I don't altogether gather your meaning.

Q. You take a refrigerated quarter of beef from the car or ship; it don't come in contact with anything; the temperature is reduced by the ammonia process, that is by pipes filled with a solution, or sometimes it is done with ice, but usually with this process. Now, if you take that out of this refrigerator and bring it in direct and immediate contact with ice, have you any previous experience as to the effect upon the beef?

A. I know of no material change which could be made by the handling of it in that way.

Q. Well, if you either reduce or raise the temperature?

A. Well, if you reduce the temperature it would not hurt it; raising the temperature too much would.

Q. But the effect is what I want to get from you, please; whether or not you have had previous experience as to the effect upon the beef when it is brought into immediate contact with the ice, or with ice upon it?

A. Well, I can not say that I had any marked experience.

Q. Your previous knowledge of the chemical treatment of beef led you to believe at the time that this beef had been so treated, did it, Doctor? At the time this board of survey was convened, did you have it in mind?

A. No; I had not any very marked expectations of finding that.

Q. Did you communicate to any member of the board, or any other person—

A. I do not think the matter was discussed at all.

Q. So that nothing was said to the board in regard to the matter at all?

A. No. I was not on the board.

Q. Who were upon that board, Doctor, do you remember?

A. As near as I can remember, Dr. Boyd, Dr. Brewer, and my quartermaster, Captain Williams.

Q. I have in my hand the report of that board, dated on the *Panama* September 8, 1898; and signed by Frank Boyd, major, W. P. Williams, captain, and C. Brewer, acting assistant surgeon, U. S. Volunteers, recorder, purporting to be transmitted by you: "The foregoing proceedings are approved, and I direct that this tainted meat be at once thrown overboard, as the stench from it pervades the adjoining part of the ship, where 150 convalescents slept." That purports to be a copy of the report by you. Is that, in your judgment, a copy?

A. Yes, sir.

Q. Then what is contained in your report would be verified—rather nearer correct than your memory?

A. I should say so.

Q. It is pretty hard for a busy man to remember dates.

A. Yes; and even dates may be wrong also in the writing.

Q. Now, I understand you to say, Doctor, that you have no knowledge whatever as to where this beef came from upon the *Panama*?

A. I would not like to put it so strong as that; it was commissary beef, the most of it—refrigerated beef.

Q. The vessel from which this beef was brought, that you saw, would help us, if you knew it.

A. I am sorry to say I can not tell you, but my impressions are—I would not like to be held accountable for how I arrived at them—that this beef came off the vessel that went to New York and from which beef was thrown overboard.

By Captain HOWELL:

Q. The *Manitoba*?

A. I can not say positively, but that is my impression. I was careful to satisfy myself, however, that the beef from which I got the beef tea or soup was so-called refrigerated beef.

By General BEAVER:

Q. Had you any other beef on board the *Panama* except what had been secured by Captain Irvine, so far as you know?

A. I am under the impression that this ship, the *Panama*, which had been used in the harbor as a residence of a lot of contractors, had some stores there when I had charge of the vessel; but as to what quantity of beef I could not exactly tell. There was a small private ice box in which officers had some beef for themselves.

Q. Then there was other beef on board the *Panama* besides what you got?

A. No, sir; what beef we got came from these transport ships.

Q. If there was any beef on the *Panama* when you went there you had no direct knowledge as to the source of supply—where they got it?

A. No, sir; I could not tell you.

Q. In making your inspections, Doctor, at other points—had you been detailed for making inspections, either at Jacksonville or elsewhere?

A. Well, much of my work, sir, from the first to last, was in the nature of inspections.

Q. Well, were you especially detailed either at Jacksonville or Chickamauga to make inspections of the camps, or anything connected with the camps?

A. Are not we getting a little beyond our story? We were on the *Panama* and haven't finished. We are getting away from the essence of our subject. I have that powder here for you to taste and see the tests made in your presence.

By Colonel DENBY:

Q. I think we had better take the Doctor's word for it, or have him leave the powder with us.

A. I object to it going out of my hands yet. I am perfectly willing that you should conduct the test in my presence.

Q. I desire that a Government chemist shall test a portion of that.

A. There is very little of it, yet sufficient for a proper test.

By Dr. CONNER:

Q. I would not be willing, as a witness, to put myself in a position to present a specimen and examine it, and not have my work corroborated by someone else. It is a matter of too much importance.

A. I am willing to have anyone who is competent test it in our presence, or I will do it if you wish. There are three things needed in a chemical test, viz: Cleanliness, strict method, intelligent attention; and the same reaction under a test that took place one thousand years ago can be repeated to-day, and can be repeated two thousand years hence if time lasts so long.

By Governor WOODBURY:

Q. Let the Doctor give us a share.

A. I think you will find a share very small.

By General BEAVER:

Q. Would you consent to test it with a Government chemist who will be here at 2 o'clock this afternoon?

A. Yes; with the greatest pleasure.

By Dr. CONNER:

Q. I am free to confess that it is thirty years since I studied chemistry and I know little about it now, but Professor Clarke will be here at 2 o'clock. Will he be satisfactory to you?

A. Yes.

By Colonel DENBY:

Q. Then leave it in the hands of the recorder until Professor Clarke comes?

A. No, sir; I trust the commission will not ask that; it is unreasonable.

Q. Well, seal it up in our presence.

A. I will do so. [Seals envelope.]

By General BEAVER:

Q. Can you tell, with absolute certainty, Doctor, whether that came from the beef which was left on board by the contractors, or what was furnished by Captain Pomroy to Captain Irvine?

A. It was from what we got ourselves from the commissary.

Q. Not quart bottles?

A. One bottle broke in my portmanteau and I had only one left when I got home.

Q. About a pint?

A. I think more than a pint and less than a quart. Touching the question that you wished me to answer about the other analysis—after I arrived with the *Panama* and finished that detail, I was ordered by the Commanding General of the Army to go with a board of officers and inspect the so-called immune regiments at Jacksonville, Chickamauga, and Lexington—

Q. How do you fix the date of your report as being on the 21st of October instead of the 21st of September, as it was given to us from the report that General Miles had in his hands? That was a very serious discrepancy.

A. That is a mistake of date by my own typewriter. I did not reach Pittsburg until about the 18th of October, and that report was forwarded from Pittsburg and should be dated October 21, 1898. I signed it. I certainly overlooked the date.

Q. It was not a mistake in copying?

A. It was a mistake of my own private typewriter. In this report you have got here, it may be, some words which are not correct and are not mine. I do not know.

Q. We have the report that General Miles submitted.

A. The report is genuine in the main.

Q. Did you have any conversation or conference with General Miles in regard to the beef furnished to the army at Porto Rico before you came north on the *Panama*?

A. I am under the impression that I reported orally my apprehensions about the beef. Then followed some questions on the part of the Commanding General as to what my observations were in my various tours of duty on the island. What my observations were about the quantity and quality of the beef cattle.

Q. Of the native cattle?

A. Yes, sir; I reported, I think, quite favorably, because in my various tours of duty here and there I had seen a great many very fine cattle, and I am under the impression that I reported that, with proper selection, plenty of beef cattle could be had on the island of Porto Rico. I saw an abundance of very fine cattle in grass of fine quality up to their bellies, but of course also saw the usual number of scrubs and work cattle attached to carts on the roads.

Q. Had your suspicions been aroused in regard to the beef being chemically treated before you saw the beef you obtained from the *Manitoba*?

A. I have never said I obtained beef from the *Manitoba*. I prefer not to have words put in my mouth.

Q. Well, taking it for granted that the beef you had on the *Panama* was from the *Manitoba*?

A. I had suspicions.

Q. You had begun to suspect the beef?

A. Yes, sir; I had begun to suspect the beef.

Q. Had you seen General Miles yourself after giving him some intimation of your suspicions up to the time you made this report?

A. Well, I saw General Miles more or less every day while on duty at Ponce, yet as a matter of fact it was very rarely that I talked with him. He was very busy, and being a man of very few words, never talked too much.

Q. You do not quite apprehend my question, Doctor. From that time to the time you left him at Porto Rico, and the time of your making the report on the 21st of October, as you know, then it was—

A. I am sure it was; there is no question about that; do not mistake me.

Q. Then, had you any other conversation or communication with him in regard to the beef in the meantime?

A. That is difficult for me to say.

Q. Had you seen him in the meantime?

A. Yes, sir.

Q. I thought you had probably gone to him after your arrival on the *Panama*.

A. Yes; I had reported to him at headquarters of the army, and also rendered my accounts to the commissary-general; transacted some other business, then went to Pittsburg, Pa., where I received my orders to go South on the inspecting tour. But after I first reported to General Miles, I do not think I saw him again until I came to Washington to go on the inspecting tour. Then, again, I saw him a little over a month ago.

Q. When, in reference to the day of this report, did you make the analysis of the beef extract which you took from the *Panama*?

A. I landed my patients at Fortress Monroe on the 10th of September, and was in Washington, I think, on the 11th or 12th of September. I then went to Pittsburg, and made the first analysis within a few days thereafter.

Q. Then the analysis was made before you made the report to General Miles?

A. Yes.

Q. You had what you considered, then, pretty positive proof, absolute proof, if chemistry is to be relied upon, that beef which you believed was furnished the United States by the contractors was chemically treated and that such chemical treatment was hurtful to the health of the soldiers of the Government?

A. Yes.

Q. And you said nothing about that in your report?

A. I think I used pretty plain language in that report. I am under the impression I did.

Q. Language sufficiently plain to indicate what your proof was, you think?

A. Yes.

Q. Doctor, you think these sentences would lead General Miles, or any person to whom the report was made, to think that you had actual chemical evidence in your possession which would substantiate the charges that were made?

A. Do not put words in my mouth, if you please.

Q. Of course you have the right to say whether this is your language or not.

Colonel DENBY. Why don't you take General Miles's copy?

General BEAVER. Well, that is very important from another point of view. [Copy produced.] Now, I read the sentence from the copy of the report from which General Miles read in his testimony before us.

A. I want to say that the report he read is genuine, except the date.

Q. This is the report he read to us in his testimony. This is the sentence, commencing, "Believing that the Commissary Department has been imposed upon by the misdirected commercial spirit of persons furnishing beef, I respectfully recommend that the matter be investigated by experts, making a quantitative and qualitative chemical analysis of the several preservatives suspected to be used by getting samples of beef furnished for export to Cuba and Porto Rico." Does that indicate that you had made an analysis and had actually found present the chemicals?

A. It does not contra-indicate it.

Q. When you say "suspected," is it with reference to a thing of which you were chemically certain?

A. Well, I feel sure that I am right for my own satisfaction, but, fortunately, there are others to be satisfied about it as well as I.

Q. The point I want to make is this: This commission regards this as a very grave charge—

A. Well, I trust the commission will also regard the conditions that involve the making of that report as serious.

Q. Now, if you had actual knowledge on the 21st of October that such a thing did exist, it seems to me—and I am not speaking for the commission, but from my own standpoint—that that knowledge should have been communicated to General Miles, and that he should have communicated it immediately to the officer who had charge of these contracts and looking after the fulfillment of them.

A. Pursuing the same line, that report is made without malice, and without impugning anyone's motives, and it was and is to be supposed and hoped that every gentleman, either in the Army or out of it would take up with the same spirit and pursue the subject calmly, without undertaking to hold an inquisition upon or to investigate the men who made the reports, but rather to probe along the same lines and either verify or refute them.

Q. Did you inform General Miles outside of this communication that you had made a chemical analysis and that you had discovered the presence of boracic and salicylic acids?

A. From memory I would not like to say; I am under the impression I did.

Q. At the time or subsequently?

A. I am under the impression I imparted my suspicions in Porto Rico.

Q. In Porto Rico you hadn't made the analysis?

A. As soon as I had my suspicions I am under the impression I communicated them to him.

By Captain HOWELL:

Q. Now, do I understand that you reported in Porto Rico that you had suspected this beef?

A. Yes.

Q. And that it caused the sickness of the troops?

A. That is putting words in my mouth. I have not said that, but I am willing to stick to my observations.

Q. I want to know.

A. My answer to that is, I am sure I told General Miles of my impression and my suspicions.

Q. That that beef was treated in that way?

A. Yes.

Q. How long before you came north was that, Doctor?

A. I think that that was along about the time I had charge of the Spanish hospital.

Q. What time in August?

A. I think that was along the first week in August.

By General BEAVER:

Q. Do you know, Doctor, whether any steps were taken after you communicated your suspicions to General Miles to verify these suspicions?

A. By me?

Q. Or by General Miles, as far as you know?

A. I can not answer that; I know I took all the opportunity that came in my way.

Q. And you felt that you had discharged your duty when you communicated it to the Commanding General?

A. Finally; yes, sir.

Q. Now, do you know whether or not the suspicion that beef chemically treated was being fed to the troops was communicated by General Miles to the officers of the Commissary Department in any way?

A. I have no way of knowing that.

Q. Unless he would tell you, of course?

A. I would have no way of knowing that. General Miles is a man who never talks much.

Q. Now, you say, your recollection is that you did communicate the fact of analysis to General Miles. Was that at or about the time this report was made, or was it earlier?

A. No; I think it was later.

Q. Can you tell about how much later?

A. I could scarcely tell from memory.

Q. Was it verbally or in writing?

A. I think it was both.

Q. If verbally, was it in Washington?

A. If it was at all, it was in Washington. I haven't seen the General anywhere else.

Q. You didn't see the General out of Washington?

A. No.

By Colonel DENBY:

Q. Was it official?

A. Not necessarily official.

By General BEAVER:

Q. Have you any recollection seeing General Miles when Major Black was present?

A. Yes.

Q. Was this subject discussed at this time?

A. I think there was something said about it.

Q. Do you know when that was?

A. Yes, sir; I think the morning General Miles appeared before your commission.

Q. That was in December?

A. Yes, sir; I think that was about the 15th or 16th of December.

Q. You were in Washington, then, at the time General Miles appeared before the commission?

A. Yes.

Q. And you had informed him prior to that time of your analysis?

A. No.

Q. You hadn't informed him that you had made an analysis?

A. No.

Q. It was subsequently about the time he appeared that you told him that you had made the analysis?

A. Yes.

Q. How long?

A. I can not say.

Q. Was there any reason, Doctor, influencing you in keeping that from General Miles for more than two months?

A. None whatever.

Q. Well, you regard that as a very important item of evidence, don't you?

A. Understand this report of mine was simply recommending an investigation. I presumed this Government could have any number of experts if they wanted them to proceed independently; but this examination and analysis was purely to satisfy my own mind.

Q. Do you know whether the attention of the Government was ever called to this subject in any way?

A. It was called to it by my report.

Q. Well, if your report never saw daylight—

A. That is no fault of mine.

Q. I know; that is just what I am getting at. Would an officer of the Army be expected to make an investigation based upon suspicion as readily as if it was based upon facts?

A. I do not know what they should not, if the observations were honestly made.

Q. The only difference would be that in one case there would be knowledge, and in the other case simply a mental conviction.

A. Yes.

Q. You were in the service as a surgeon, and, of course, under the orders of the Surgeon-General to some extent. Did you make any report in regard to this matter to the Surgeon-General?

A. I do not know that I did, sir. My position, as I understood it—with my assignment to special duty on General Miles's staff I understood my duty to be to make my monthly reports and personal reports to the Surgeon-General and the Adjutant-General of the Army, which I did; and otherwise, I considered I was under the immediate orders of the Commanding General; and while I wrote occasionally to the Surgeon-General, more in a social way than an official way, I did not feel that it was any part of my duty to make report to him direct, knowing that all matters connected with the medical and other departments were invariably at once referred to these departments.

Q. Did you in any way, verbally or in writing, socially or officially, communicate the result of your investigation to the Surgeon-General?

A. I regarded my reports as ample.

Q. Even when you wrote to him?

A. I regarded my reports as covering the ground.

Q. Then you did not report this matter to the Surgeon-General at all?

A. Except in my report; there is a rule of the Army that it would be referred to his department in due time.

Q. Then you regard the obligation, so far as you were concerned, as discharged?

A. Certainly. It is a matter to go where it is intended to go.

Q. Did you ever encounter any other officer, medical or otherwise, who had any suspicion in regard to the chemical treatment of the beef furnished to the troops?

A. I did not talk about it.

Q. Did you hear any other officer talk about it to you?

A. I do not believe I ever talked about the matter to any officer; pardon me, excepting at one of the inspections of the Sixth United States Volunteers at Chickamauga.

Q. At what time?

A. About the 26th of September I inspected a lot of beef that had just been brought from the post commissary to the regiment, and there were a lot of soldiers working with it, cutting it up. I examined it, smelled it, and it had a very strong odor, such as I speak of; not so very pronounced, but so much so that to one who had smelled it before it was plainly discernible. I do not know who the commissary officer was who was present, but it can be learned.

Q. The Sixth Immunes?

A. The Sixth United States Volunteer Infantry. We all examined it. While I said nothing, and I think I withheld my opinions generally, I thought this was my duty as long as nothing could be gained by creating additional discontent. I do not know who was present, but after examining and smelling it they said it looked all right but it did not smell right; whether it was the noncommissioned officer or one of the privates that said so I do not know.

Q. The depot commissary?

A. No; the regimental commissary. It was being cut up and distributed at the regimental commissary. This beef looked all right and looked very nice, except it had the peculiar odor. I tasted some cooked the next day and it had this same unnatural, disagreeable, and unpalatable taste.

Q. If the agreement of the Commissary-General with the contractor was that chilled or frozen beef should be furnished, and they delivered them chemically prepared beef, they would be perpetrating a fraud upon the Government?

A. I am not the jurisdiction as to that.

Q. Well, wouldn't that be a fraud?

A. This thing has been a sort of an open secret, that hotels and boarding houses have used such methods—I do not think with any criminal intentions. I do not think anyone believed it was any more harm than in using salt. I do not think it was done with a fraudulent intent. The strongest words used in my report could not be construed to mean that.

Q. "Believing that the Commissary Department has been imposed upon by the misdirected commercial spirit of persons furnishing fresh beef, I respectfully request that the matter be investigated."

A. The strongest term is "misdirected."

Q. Well, "imposed"—that means fraud.

A. No, not necessarily. I did not consider the onus upon me then or now. It is the Government's case. I simply discharged my duty as I thought I should discharge it as a Government officer, and it can go at that.

Q. But you are here to help us. We want to make out the case if there is one. You may be sure of that; but the point I make is this, Doctor: Believing this, as you undoubtedly do in your own mind, not only from suspicion but from actual analysis, that that thing had been imposed upon, don't you think it was your duty to communicate the facts a little more fully than you did in this report?

A. No; you see it will occur to all of you that the times and conditions had passed. The hot weather had passed, the war had closed, and it was more with a view to correct the thing in the future than to remedy what had occurred.

Q. That is what we are trying to do.

A. I think so.

Q. And at the same time fix the responsibility for the failure to disclose the abuses, if they existed.

A. Well, I shall not shirk any responsibility, I assure you.

Q. That is the point—that is what I am trying to get you to say, whether or not, in your judgment, you did all that you ought to have done in the premises to call the attention of the Government to this belief in your mind that the Government was being imposed on?

A. "One swallow doesn't make a summer," and one observation doesn't give conclusive proof. I have lived fifty-seven years in this world, and I have grown a little cautious. I do not feel like jumping at conclusions, even with a chemical analysis. I have gone back to that again and again until I have used up nearly all my material; but nearly every time I went to the tests, so far as getting anything that would make me recant, I have got something to make my fears

stronger. You must remember not much time has elapsed, and you must remember that the first evidence I got was on the *Panama*, about the 15th of September, 1898.

Q. On the 7th the beef was destroyed?

A. No; the analysis that gave me proof was about the 15th of September, or later.

Q. That was after you returned home?

A. Yes. My report was made about the 21st of October. The conditions had changed meantime. The weather had got cooler, and I felt that the conditions were not existing that held during the hot months, and I have nothing to say in excuse of tardiness. I think I used the ordinary discretion—waiting for my own observations to be confirmed—and I have no excuses to offer. If I withheld any private experiments, that was my own private affair, because I had recommended the Government to make investigations for itself. Although a student of chemistry for thirty years, and although I graduated very high in chemistry, I did not suppose the Government would care to take my analysis as conclusive, notwithstanding I believe it was carefully made.

Q. It was satisfactory to your mind?

A. I tried to be cleanly, follow strict methods, and give careful attention.

Q. Just go back a little. You took this extract of beef out of what?

A. Out of a big caldron.

Q. Had you known what was previously in that kettle?

A. I had it perfectly cleaned in the morning.

Q. You had it cleaned?

A. Yes, sir; that ship was kept clean from top to bottom.

Q. Had you noticed this particular vessel in the morning?

A. Yes, sir.

Q. Was nothing in it?

A. Yes.

Q. So there was no possibility of a mistake as to the material which you put into your bottle?

A. No.

Q. Was it cleaned with a view to making these experiments?

A. I think it was.

Q. That is important, then?

A. Yes.

Q. You had this experiment in mind?

A. Yes, sir. But I will say the vessel was no cleaner than it was any morning. I either inspected the ship myself or delegated other officers to inspect all parts of the ship every day, and I went around all over every part of the vessel three or four times during the day and night.

Q. Now this beef from which you made the extract, was that the beef which the contractors left on board the ship?

A. No.

Q. Was it native beef drawn from Captain Pomroy, or the so-called refrigerated beef.

A. It was the refrigerated beef.

Q. Did you make the selection yourself?

A. No, sir. At that time there was nothing but refrigerated beef. The first beef they used on the vessel was what appeared to be the native beef. And by the way, if it is not breaking in—

Q. Go ahead.

A. Since talking this morning about the number of pounds of beef, I want to say that we drew rations, according to my recollections, for ten days for 255 men.

At a pound a day that would be 2,500 pounds, but I am under the impression that we kept within that limit and drew 2,000 pounds; but it is no matter what report you have, I saw the beef repeatedly and I am sure nearly 1,500 pounds was destroyed. I merely make that remark.

Q. We have the original report of the board of survey which you transmitted.

A. Does that say 900 pounds?

Q. 900 pounds.

By General DODGE:

Q. That is what relieved the commissary of his responsibility?

A. Well, the discrepancy is not a very important one. It is a matter of pounds, that is all. [Witness examined paper.] This report here is in my own handwriting, but it does not say anything about the number of pounds.

By General BEAVER:

Q. But it says in the report of the officers, if you will look at that, 963 pounds?

A. Well, I still think that is wrong, because I looked at and examined the beef several times, and I got my clothes so saturated with the foul smell that it is hardly out yet. It was the biggest 963 pounds of beef I ever saw.

Q. Now, coming back to our main track—the extract of this so-called refrigerated beef, made in a clean kettle, you put into what kind of a bottle?

A. Into aerated water bottles. I got some from the hospital ship *Relief*, where they had apparatus for pumping carbonic acid gas into water in bottles, and two of these bottles were emptied and used.

Q. Did you take the bottles and clean them?

A. No; they were clean.

Q. Just emptied the water out?

A. Yes.

Q. Did you taste the water out of this bottle?

A. I don't know that I did; but they were brought from the cabin, where all that water was stored.

Q. I think you said the bottles were sealed at the time?

A. They were corked, and I put them in my portmanteau.

Q. So you think there can be no mistake as to the material you analyzed?

A. No; I have no doubt about that.

Q. And as to the result of that analysis you are equally confident? Did I understand you to say that they were simply corked and not sealed?

A. I understand it is customary to seal them; but these were practically sealed, being put under lock and key.

Q. They were in no one else's possession until you made the analysis?

A. No.

Q. In your conversation with General Miles and Major Black—was there any conversation?

A. There was not any.

Q. Did you at any subsequent period ask General Miles whether he had communicated the contents of your report to Secretary of War or Commissary-General?

A. I don't think I asked the question.

Q. He never told you he had?

A. General Miles talks very little. I usually had little conversation with him.

Q. Do you recollect any conversation with him in regard to your report subsequent to the time at which it was made?

A. No.

Q. Doctor, at the time that you saw this beef aboard the vessel at Tampa, was it your opinion that that beef was issued to the troops?

A. I do not know that I formed any opinion about it.

By Captain HOWELL:

Q. You stated in your direct examination that you thought that was a part of the beef that was issued?

A. No; I said that as far as the conversation went between Colonel Weston and myself, that while he did not say whether that was a part of the cargo or not the impression was left upon me that it was, but I didn't say that it was or was not, understand me, but the impression was left that it was a quarter of beef brought out of the hold of the vessel. I have such a high opinion of Colonel Weston that if he would say it was not I would believe it without question.

Q. All I wanted to understand was whether you were under the impression that that was a part of the cargo.

A. Not by the words of anybody.

Q. But that was your idea?

A. Yes.

By General BEAVER:

Q. Did they have any fresh beef on the transports going to Santiago?

A. I did not go there.

Q. Have you any knowledge on the subject?

A. I don't think I would be competent to say anything about it.

Q. Now, then, Doctor, going back to your visit to Jacksonville and Chickamauga—you have already spoken of Chickamauga—when were you at Jacksonville?

A. I think we inspected the Fourth United States Volunteer Infantry at Jacksonville about the 23d of September—

Q. That was also a regiment of immunes, so called?

A. Yes.

Q. Did you inspect the food issued to the regiment?

A. Yes.

Q. What did you find with reference to it, and particularly the fresh beef issued to it?

A. They had a very fine lot of cooks in that regiment. It was an exceptionally fine regiment, finely commanded, and the cooking was very good. The beef was originally of very fine quality, but it had the unmistakable taste that I speak of, and I said to some of the cooks, "Isn't that very fine beef." They said, "Yes, but it doesn't taste right." I said, "But that soup or stew tastes very good." They said, "Yes, but we have got it full of pepper and onions; if we do not do that the boys do not like it."

Q. Was that general throughout the regiment?

A. No; that conversation did not occur generally. I could not tell you how many of the cooks told me that; but the cooks in that regiment were a very superior lot. Their bread was well baked and their beef stew was nicely flavored, and all that sort of thing.

Q. Did you make any report of that inspection either?

A. Yes, sir; I reported all inspections.

Q. Did you call the attention of the officer to whom you made the report as to that peculiarity of the beef?

A. I do not know that I did. I intended to make a special report. I reported a great many irregularities as I found them; but I think I had been digesting this matter, quietly intending to make a special report recommending an investigation of the subject.

Q. You did not in your reports communicate these facts, but saved that for this special report?

A. I do not know whether I touched upon that or not; but I thought this was

the best plan to get at it, and a special investigation to be made. I thought it was worthy of it.

Q. Undoubtedly it was.

A. You know that many of those reports often get into pigeonholes, and I thought this was a matter that should be taken up.

Q. About how long does the hot weather continue in Cuba and Porto Rico?

A. You might say all the year round. I have experienced some very hot weather in Cuba in every month of the year of which I have been there. On the southern side of Porto Rico the wet season continues from July until about October or November. That season is hot and humid. Then on until about the latter part of March the weather is somewhat better, but never what you might consider cool. On the north side there is a different climate somewhat, and they have more or less rain all the year round. They have ranges of mountains there that effect that.

Q. How is it in Cuba?

A. Well, I have only been in Cuba, not as a soldier, but as a tourist or for shooting purposes, and I have found there hot weather every month in the year that I was there.

Q. So that if it was necessary to treat this beef one part of the season it would be necessary to keep it up, wouldn't it, so far as those markets would be concerned?

A. Well, no; not to that extent. It would depend upon the wet season partly. The greatest enemy of fresh beef is humidity. Meat will keep very well if dry, while warmth is a very great abettor of the growth of putrescent germs. Yet in some parts of the United States, where they have a warm and dry climate, meat will hold good for a considerable time in the open air. Where a dry crust forms on the outside it will keep fairly well for a time.

Q. Doctor, you speak in your report of the decomposition of boric acid. Under what conditions does that decomposition take place?

A. Well, I speak of decomposition there in a chemical sense.

Q. That is, being resolved into its original elements?

A. No; it would be pretty difficult and involve a deep question of inorganic and organic chemistry and different conditions. There would be animal acids ptomaines—a very virulent animal poison, so virulent that the Indians used it for poisoning their arrows. That is the poison that occurs in putrescent beef; and the beef that is spoken of as having a green or gray beard on it can not become so unless with the action of putrescent germs; and while there has been objection offered to the use of beef with animal heat in it, there can be no sanitary objection. There is nothing unwholesome in it. You can kill and cook a chicken with animal heat in it, and it doesn't hurt. You can kill and cook beef before the animal heat has got out of it, and there is nothing dangerous to health or life in it. It may be objectionable from an epicurean point of view, but so far as the animal heat that is in it is concerned there can be no comparison, so far as a food for the Army is concerned, between that and beef with a green beard on it that is putrescent. A man who is an epicure might prefer the beef that is so-called high, or with a gray beard on it, but that man usually takes a bottle of wine or some whisky along with it that kills the putrescent germs, and nothing will kill them quicker; but when you come to feeding soldiers with that kind of food, whose vitality is low from the conditions of the tropical climate, then you are treading upon ground that is dangerous to the health of the soldier.

Q. That is not exactly the point that I am trying to make. You speak here of decomposition: "It looked well, but had an odor similar to that of the dead human body injected with preservatives, and tasted when first cooked like decomposed boric acid." Now, what is that?

A. I tried to convey this idea, sir. We'll say, for example, there is a mixture of boric acid and salicylic acid in glycerin injected with an antitoxine syringe into the flesh, or, on the other hand, we will dump out a quarter of a beef on to a table where there is boric acid, and that is rubbed over the beef, and what is not absorbed is brushed off.

Q. This boric acid is a solid then?

A. It is a light crystallized powder, and the salicylic acid is also a light powder. There is some of that absorbed, and the beef is put into a refrigerating room and kept cool by ice, salt water, or ammonia. In the course of time, sooner or later, you have chemical changes going on seriatim in the animal tissues—very complicated ones. You have the formation of ptomaines, as I say, which are highly poisonous. These chemical agents act and react upon one another, yet you have always the basic compounds there in some shape.

Q. What are the constituent elements of boric acid which makes an impression upon your sense of smell?

A. That is also a long story and a difficult one; but the taste of the compounds themselves with the beef is a very lasting, mawkish, bitter taste. I should illustrate it very well by giving you a small taste of this powder, which you would never forget. Will you taste it?

(The commission ignore the invitation.)

Q. Governor Woodbury wants me to ask you if the cooking has a tendency to destroy the putrescent germs?

A. Yes.

Q. Does it kill them boiling them in hot water?

A. It is destructive to them, more or less.

Q. Doctor, what are the elements which are usually used in the preservation of the human body after death; do you know?

A. Yes, I know some little about it. Nearly every undertaker or embalmer has his own recipe, which is infallible in his estimation.

Q. Are they similar?

A. Yes, somewhat so. They are usually boric acid, salicylic acid, or something like that.

Q. What are the substances ordinarily employed in the injection of the human bodies for anatomical purposes?

A. They vary; nearly every dissecting room has its own preparation.

By Dr. CONNER:

Q. What are the special articles employed in the various methods of preserving dead bodies?

A. I think the bichloride of mercury is largely depended upon.

Q. What next?

A. Boric and salicylic acids and glauber's salts, and various other things.

Q. What else—what is the most common?

A. In the so-called pickling they use nitrate of potash and salt.

Q. What is the most commonly used?

A. The bichloride of mercury, because if they get wounds they are not liable to be septic.

Q. Do they not use bichloride of zinc?

A. In former years they used the chloride of zinc.

Q. Is arsenic also employed?

A. I don't think that is so much, now.

Q. Cold storage is also employed?

A. Yes.

By General BEAVER:

Q. Were those substances of which you spoke, Doctor, found in the beef of which you speak?

A. I only spoke of two substances.

Q. You found no other?

A. I looked for no others. I must confess that I have some other knowledge which led me to look for these two chemicals.

Q. Was that what you observed in the Army as an officer?

A. No; it was based on an active life in the practice of medicine.

Q. So far as you know, Doctor—of course you can only speak of your own knowledge—was this report of yours ever forwarded from army headquarters to any person directly interested in the subject?

A. I do not know who would be more interested in the subject than the Commanding General of the Army.

Q. Would he order an investigation or submit it to the Commissary-General?

A. I think the laws should enable him to control all these matters. I think the laws should enable the Commanding General to do all these things, otherwise he is not permitted to be a commanding general.

Q. Suppose he didn't.

A. That is another story.

Q. I suppose the War Department or the heads of the departments were particularly interested in that. The commanding officer would forward this to the proper person to make an investigation?

A. I can not conceive of any situation so improper as that.

Q. Did the Commanding General of the Army make the contracts for furnishing the Army with beef?

A. That I could not tell. I am under the impression, though, the Commanding General of the Army should take cognizance of anything detrimental to the service or the health of the soldiers under him, otherwise he would not be a commanding general. He is responsible for their welfare, and should control the matter.

Q. If he took no steps to investigate it or to communicate it to those who could investigate it, what then?

A. I don't believe that is a fair question to ask me.

Q. I hold in my hand, Doctor, what purports to be the contract of the United States Government with the parties who furnished the beef for Porto Rico. That is signed by the Commissary-General of Subsistence and by Swift & Co. through its president and secretary. Now, if the Government was being defrauded in that contract, who should know it, the man that made the contract or somebody else?

A. It seems to me that all concerned should know it. Not only the Commanding General, but all others interested should work calmly together to improve the condition complained of.

Q. If one of the officers had information which the other officers could not have except by his communicating it, who is responsible?

A. Don't ask me. My opinion is not worth anything concerning that matter; that is for others than me.

By Colonel DENBY:

Q. When were you at Tampa?

A. I think, sir, we arrived at Tampa about the 30th of May or the 1st of June.

Q. You were there in an official capacity, of course?

A. Yes.

Q. You were always a surgeon while in the service, were you not?

A. Yes.

Q. You discharged surgical duties and looked after the health of the troops?

A. Yes, as far as possible for me to do.

Q. And you tell us that you knew at Tampa that this beef was treated chemically, did you?

A. I have detailed my experience to you while there, but my suspicions were not then aroused.

Q. Here is what you say—you have already said this was correct: "I have found the fresh beef to be apparently preserved with secret chemicals, which destroyed its natural flavor, and which I also believe to be detrimental to the health of the troops." So, then, you knew, or thought you knew, on the 30th of May, that this beef was detrimental to the health of the troops?

A. Don't put words into my mouth. I arrived there only on the 30th of May or 1st of June, and never saw the beef spoken of until about the 15th or 16th of June, 1898.

Q. You fixed the time?

A. It was one or two days before the Shafter expedition sailed that I saw this quarter of beef—about fifteen days after the time you fix as being the time.

Q. When was that? It was on the 17th of June. Now, wasn't it your duty to communicate that enormously important fact to your superiors?

A. Well, I am under the impression I communicated that in due time.

Q. To whom?

A. The commanding general.

Q. Now, about what time?

A. Along about the early part of August.

Q. Then at what time were you at Jacksonville?

A. I was at Jacksonville about the 23d of September.

Q. Then you found the same thing existing at Jacksonville?

A. Well, I don't think I would like to characterize it as the same thing. I found things there that impressed me that the beef had material used upon it or in it that affected its taste.

Q. Did you communicate that to your superiors?

A. In my report.

Q. Your report was not made until two months afterwards?

A. If the question is asked if I made a written report each time I made the observations, I would say that I did not.

Q. Then you, being a doctor and charged with taking care of the health of the troops, and knew they were being poisoned—

A. I would like you to show me where I have said that, or where I have used the word "poison."

Q. You said "poison"—I took it down at the time you said it.

A. I would beg of you not to put words into my mouth, but show me where I have said it.

Q. You say this stuff destroyed the vitality of the soldiers.

A. Show me that also. I don't believe you can find it.

(Colonel Denby examined the report and could not find the words.)

Q. You said it was deleterious to the health of the troops, didn't you?

A. I said beef of that kind is detrimental to the health. I didn't use the word "deleterious."

Q. You state the same thing in your report, and you say it now, that it was deleterious to the health of the troops?

A. Detrimental is the proper word, as used by me.

Q. You afterwards went to Porto Rico—you went to Chickamauga?

A. Yes.

Q. Did you find the same condition of things existed there?

A. As I said a while ago, I made an inspection of some beef just issued from the post commissary at Chickamauga and detected the peculiar odor upon it, but not so marked.

Q. At what time were you at Chickamauga?

A. That was September 26.

Q. Did you, at Chickamauga, or after you left Chickamauga, intimate to anybody or report that that beef was detrimental to the health of the troops?

A. I did in my report.

Q. That is the 21st of October. I asked you, did you make any report up to or before the 21st of October?

A. I just stated a while ago that I did, to the commanding general alone, about the early part of August, orally.

Q. Did you say anything about your Chickamauga experience?

A. The report covers that.

Q. You don't seem to understand what I want to know—did you do your duty?

A. I believe I did.

Q. A part of our investigation is to find out whether an officer of the Army did his duty. Did you consider that an officer sent to inspect the condition of the troops who were being fed upon an article which, according to your statement, was being fed to the troops, and which you knew, because you swore you cooked it and ate it, and it made you sick—so do you regard it, then, that a man does his duty when he conceals these things all during the war and down until the 21st of October?

A. There is a report made for each of those regiments, and for each of those regiments I reported the conditions as I found them; so you are talking about a hypothetical case, a case that does not exist so far as I am concerned.

Q. Did you make any report where you said this meat was chemically preserved? If you did, we will send and get it.

A. I am not prepared to say that I said this meat was preserved in the reports of those regiments.

Q. Why did you suppress it?

A. I did not suppress it.

Q. Why did you allow 275,000 soldiers to eat beef which, not only in your opinion as a physician but as a man, was not fit to eat? Tell us that, Doctor. It is something the country is entitled to know.

A. I have said it in my report and there it is. It is carefully prepared, after making my observations, and there was no unnecessary delay. Is a man to howl to everybody he meets that he has found this and that? There is a decent, calm, and proper way to do things, I believe.

Q. Would you do that with a private patient?

A. I certainly would not make a great hullabaloo and noise about it. I would try to do it in a decent, orderly way.

Q. You would not allow a private patient during September and October and down until this time to eat meat that was injurious to the health?

A. A private patient would not be a parallel case at all. I have full control of a private case. With the patients or conditions of the Army it is quite a different thing. You can only recommend, that is all. You can have a great many views, but having your recommendations carried out is a vastly different thing.

Q. But explain how it was that during August and September and down to October you did not raise your hand, so far as you have told us, to prevent the use of this meat, because you are on trial now.

A. Am I? I do not so regard it.

Q. You are on trial—if you knew of all these awful, terrible—

A. It does not matter how much this commission would like to put me on trial; I am not at all on trial. I decline to be on trial. I am not here in any other sense than to give testimony simply as a witness.

Q. Please tell us why you had no explanation to make before.

A. I had no explanation to make except so far as my report there goes, with the supplemental information that I have tried patiently to give you to-day. I don't propose to be put on trial by this commission or anybody else, with all due

respect to you. I do not believe this country will put me on trial. I am not afraid for one moment that my fellow-countrymen will ever put me on trial for having simply done my duty and reporting with due deliberation and without unnecessary delay.

Q. Do you think you did perfectly right in locking up within your own breast this information?

A. There was no locking up. I simply made my observations carefully and maturely, and reported as soon as I could proceed on common-sense grounds.

Q. You say this meat was apparently preserved. What do you mean by that, Doctor?

A. I mean just what I said. The English language is plain enough.

General BEAVER. I don't want to appear to champion the witness, Colonel Denby, but it is hardly fair to the witness to go into motives.

Q. When did you first analyze this meat?

A. I have answered that question three times already, and I submit, gentlemen, that, while I want to be respectful, I don't feel that this commission or any member of it has a right to attempt to badger me or be disrespectful to me.

Q. You analyzed it about the 15th of September?

A. Yes, sir. I told you that twice before, and other members of the commission twice or three times before also, and sufficiently plainly for persons of ordinary intelligence to understand me.

Q. This paper was written on the 15th of October.

A. Was it? I told you it was sent forward about the 21st of October, and it was also written about that date.

Q. Why did you not make the report before then? Of course, when you wrote the paper you knew what the result of the analysis was?

A. I was not so sure then as I am now. I went back again and again and tried to satisfy myself in my several analyses.

Q. And yet you didn't state in this paper that you had analyzed it?

A. I conceive it is not necessary to always state all you know. I gave the Government in my report enough to enable them to investigate the subject. The analysis was for personal assurance that I was doing what was right.

By Dr. CONNER:

Q. You state it tasted when first cooked like decomposed boric acid. Now, the question has been asked you, Doctor, but I want to ask it again, under what circumstances this boric acid decomposes; in other words, how are you able to effect a decomposition of boric acid?

A. Well, speaking chemically, if you unite boric acid with certain sodium compounds you have biborate of sodium; that is what I mean by chemical decomposition, and, chemically speaking, we have a changed condition of the elements engaged in the reaction.

Q. Is there any decomposition of boric acid or boracic acid in the composition of biborate of soda?

A. Yes, sir; in the union. That is, speaking in chemical parlance, a decomposition, forming a new compound.

Q. Is it or is it not a composition of boric acid and oxide of soda?

A. I would like to be understood that I use the term in a chemical sense.

Q. Pardon me, but let me ask you—by decomposition of boric acid, not having it combined with any base it may find in order to produce the salts or the result, the boric acid itself is not decomposed if there is no destruction of the acid?

A. I think I get at what you mean. No, sir; there is not.

Q. Now, in the decomposition of boric acid, is it possible where the decomposition of anything in the flesh or fluids of the body to effect that decomposition of boric acid and stable compound?

A. I think you are right from your standpoint, and I am also. The boric acid could be recovered again, and I think I have been misunderstood.

Q. Then you mean recomposition instead of decomposition?

A. You have supplied the word—have it so.

Q. Then it is not decomposition, because that requires a tremendous amount of chemical force?

A. Yes.

Q. Therefore, the odor that was present was the odor, in your judgment, of something produced by the combination of boric acid with some base that it found in the flesh?

A. Yes, sir; base or bases.

Q. Now, then, the boron which is based on the element of which oxide is the acid—has that boron any odor?

A. I don't know that I ever saw boron.

Q. It can hardly be regarded as set-free boron. You have already stated, as I understood you, that you could recover it, to use the chemical terms, from the fluids in which it is present?

A. Yes.

Q. To go back to the elk and antelope—is it possible or not, think you, that it was ptomaines in that meat that made you sick instead of boric acid?

A. At that meal we did not have a very good chance to get ptomaines; there was no animal putrescence.

Q. That may be, but do you not think it was ptomaines?

A. No, Doctor; the taste was so marked, and the effects were so marked. It is a question of the tests and the other experiences.

Q. Was it not possible that it was ptomaines that had developed in the decomposing meat that was responsible for your sickness?

A. No; it was fresh, and not decomposed. I doubt whether ptomaines will develop very early in meat treated with boric or salicylic acid.

Q. It makes no difference how old it is, does it? Ptomaines are being developed immediately from death, are they not?

A. Chemists have never been able to settle when it begins. It is like eating mushrooms; if they kill you they are toadstools, and if not they are mushrooms.

Q. Is it not a fact that one of the earliest results of ptomain poisoning is to upset the stomach?

A. No. If you will pardon me, I have made a good many observations in ptomain poisoning. If you will observe from this on, you will find that the largest number of cases show nervous irritability, like a nervous breakdown. Many cases of autoinfection, or so-called neurasthenia, are nothing less than ptomain poisoning.

Q. This is not the place for that; but I do want to ask you whether the ordinary ptomain poisoning is not characterized by vomiting?

A. No; not in ordinary cases.

Q. Oh, now, another thing. In vomiting after eating this meat that you speak of, your recollections might have been awakened at the mere suggesting of any meat that was not good.

A. I have practiced hypnotic suggestion, but not on myself. I wish I was more imaginative than I am.

Q. But can you eat an egg that is not thought to be good, even if it is? I can't.

A. I don't know. It depends on circumstances.

By General BEAVER:

Q. Did you say in the early part of your examination that you had no knowledge of a letter from General Miles in regard to this subject?

A. Who to?

Q. Anybody.

A. The only knowledge I had I think I saw in the Army and Navy Journal, that General Breckinridge's department had sent out letters. I received such a letter recently.

Q. You never received a letter previous to making such a report?

A. No.

WASHINGTON, D. C., *January 21, 1899.*

TESTIMONY OF PAYMASTER THOMAS H. HICKS.

Paymaster THOMAS H. HICKS, being duly sworn, testified as follows:

By General BEAVER:

Q. Will you kindly give your name and title and rank in the Navy?

A. Thomas H. Hicks, paymaster, U. S. Navy.

Q. Your title is the same as your rank? Are you addressed as "paymaster?"

A. Yes, sir; but I have the relative rank of lieutenant.

Q. What are your duties as paymaster in the Navy?

A. Well, they are rather varied. Do you mean at the present time?

Q. The duties attendant upon the rank of paymaster.

A. On board ship we have charge of all the provisions and clothing of the men and all the money of the ship—that is, we purchase all supplies and pay all the officers and men; and on shore we are purchasing pay officers—that is, in the larger cities there are purchasing pay offices in which all supplies for the Navy are bought and paid for under the Bureau of Supplies and Accounts; in the navy-yards we are paymasters and pay all the officers and workmen, all the pay rolls, and in addition are general storekeepers—that is, we have charge of all the supplies of the Navy, with the exception of the medical stores.

Q. And where are you stationed now?

A. I am assistant general storekeeper at the navy-yard, New York.

Q. How long have you been in that position?

A. Since December 7, 1897.

Q. Is it part of the duty of the paymaster at such a station to furnish the supplies for vessels that are being fitted for a cruise, or for service, there?

A. Yes, sir.

Q. What knowledge, if any, have you of the commercial article known as "prime roast beef"—canned roast beef?

A. Well, I have inspected all the roast beef that has been furnished to the New York Navy-Yard during the past year—that is, from December 7, 1897, to the present time. What knowledge have I?

Q. Yes, sir.

A. It is largely that of personal experience on board ship. We have personal charge of these provisions on board ship, and I have had experience for the past six years issuing them to the men, and in New York I have charge of the provisions and clothing.

Q. And the commercial article known as "canned roast beef," is it a standard for issue to the Navy?

A. Yes, sir.

Q. To what extent is it supplied—what proportion of the Navy ration consists of canned roast beef? Take a period of ten days.

A. About an average of one-seventh on the sea ration—that is, at sea.

Q. Do you issue the same quality and quantity to the officers as to the men?

A. We do not issue to the officers at all.

Q. How do they get their supplies?

A. They purchase them themselves.

Q. From where?

A. They take them to sea themselves. They have the privilege of drawing their ration from the paymaster at a regular fixed price, if, in the opinion of the captain and paymaster, they can be supplied.

Q. At a regular fixed price?

A. Yes, sir.

Q. Have you used the article commercially known as canned roast beef?

A. A great many times.

Q. Was it the same in character and quality, so far as you know, as what was purchased and issued to the men of the Navy—the enlisted men?

A. It was unquestionably so; that which was procured from the paymaster's stores and that purchased by the officers' mess also.

Q. So that your personal experience in eating it would be the experience also of an inspecting officer; that is, you have reached the same results from your inspection and through your taste?

A. Precisely.

Q. What, so far as your experience goes, has been the result of the use of canned roast beef in the Navy, as to its being a satisfactory article of diet?

A. It has been perfectly satisfactory.

Q. In what regions have you eaten it?

A. Up and down the Atlantic coast, across the Atlantic Ocean to Madeira—that is, almost to the Tropics—and from Puget Sound on the west coast to the southern part of Chile—all through the Tropics.

Q. So you have had experience with it all through the tropical regions?

A. Yes, sir; for more than a year.

Q. Has there been any difference in the results of its use in tropical than in other climates?

A. Not to any extent, sir.

Q. Do you know the brands used by you and issued by you at the navy-yard to the different vessels?

A. Well, that would be a little difficult to remember, sir.

Q. Well, here is a can bought in the open market [showing witness same]. Just look at that and see if you know that brand.

A. I know the brand very well, but I do not know whether we have accepted any of this or not. If you will allow me to refer to my inspection papers—

Q. Yes, sir. Here is another can [showing witness same]; the label is off it. Is that a familiar looking can?

A. We have cans of that nature. I should judge it might be an Armour can.

By Colonel DENBY:

Q. You can tell us where you procured your meat, can't you?

A. Yes, sir; and all we bought for the Navy during the war. I might preface these remarks by saying we do not always buy from the packer direct. It frequently happens that the representative of some large house in New York will bid in under his own name, and in that way it is, of course, impossible to remember what brands of meat were furnished; but I can give you the names of all the parties who furnished roast beef to the Navy during the past year.

Q. As a preliminary to that, will you state how the supplies are purchased by the Navy; whether, after a competitive bid for them has been had and an award—just state how it is.

A. The articles are applied for by the general storekeeper at whatever yards it may be. If there is sufficient time they are advertised on the public schedule by the Bureau of Supplies and Accounts, and if not time, they are bought by the nearest

pay office. Those schedules or bids, if it be an open purchase, are sent to all the prominent dealers, or whoever may request them; any reputable merchant in that line of business may bid on naval supplies. We require samples of the article which the bidder proposes to furnish to be submitted to the inspection board at the navy-yard, New York. On the day the bids are opened—we receive no samples after the bids are opened—they are inspected by a board of inspection consisting of three officers, and I am a member of the board of inspection for provisions and clothing at the navy-yard. In the case of roast beef, the samples will be opened and inspected, and those samples which in the opinion of the board of inspection are good enough for the service are passed; and those samples which, in the opinion of the board are not good enough are rejected. The report of the board is sent to the Bureau of Supplies and Accounts in case it is a contract, and to the navy pay office, New York, in case of open purchase; and from those which have been passed the award is made to the lowest bidder. That is, it is made to the lowest bidder whose sample in the opinion of the board of inspection is good enough for issue in the service. A man might be the lowest bidder and not get the contract, because his sample might be pronounced unfit for issue to the service.

Q. That lowest bidder, you say, might be a dealer instead of a packer?

A. Yes, sir; very frequently is a dealer—perhaps a member of some firm there in New York.

Q. That is, a dealer in New York may underbid Armour & Co. on their own meats?

A. Yes, sir.

Q. And you would take the goods, if the samples were satisfactory, from that bidder?

A. Yes, sir. We require two samples, one of which is opened by the board and examined, and upon which the report is made; and then the other is kept until the delivery is made, and if the delivery is not up to the sample it will be rejected. Of course in the case of roast beef it has happened that a dealer will submit a sample, and the delivery of 30,000 or 40,000 or 50,000 pounds would not be up to sample, in which case it would be rejected. I have a copy of the specifications for navy roast beef.

Q. Can you leave that?

A. Yes, sir.

(Witness produces the following paper as a copy of specifications:)

SPECIFICATIONS FOR TINNED ROAST BEEF.

Shall be of the best quality ox beef full weight, in tins of two pounds each, the weight of tins not included. The sides of the tins to be made of the best double (XX) or I. C. tin, and the ends to be single (X) tin. Each tin to be marked with the contents, name of the contractor, date of packing, and to be properly lacquered. Each dozen tins of beef to be enclosed in a substantial box, made of well-seasoned pine, properly nailed, the sides to be $\frac{3}{4}$ of an inch and the ends one inch thick. The top of each box to be securely fastened with nails of suitable size and length, and to be marked with the contents, name of contractor, and date of packing. The contractor shall guarantee that the beef shall keep good in any climate for one year from the date of delivery.

Two sample sealed tins of the beef which the bidder proposes to furnish must be submitted to the general storekeeper, navy-yard, New York, prior to the time fixed for opening the bids, and must be of ample size to enable a correct opinion to be formed of the article offered and to admit of its being thoroughly tested, and no sample will be received after the bids are opened.

The sample is intended to show only the quality of the article which the bidder proposes to furnish.

The articles, when delivered, must be in strict accordance with the specifications and the sample submitted; otherwise they will be rejected.

Samples according to which goods are to be delivered will not be returned. In case of necessity, additional samples of such goods shall be submitted free of charge.

Bids unaccompanied by samples will not be considered.

Bids will be considered upon only one sample, and only one sample should be sent.

The award will be made to the lowest bidder whose sample, in the opinion of the board of inspection, meets the requirements of the specifications.

Q. Who has the contract now for furnishing the canned roast beef at the New York Navy-Yard?

A. Well, each contract is bid for separately. I can tell you who furnished the last roast beef.

Q. Well, if you will, kindly do that.

A. The last contract was with Eastman & Co., of New York, for 50,000 pounds.

Q. And previous to that—you have the list of those who furnished it during the present war?

A. Yes, sir.

Q. Well, will you kindly read us that list? You may read backward.

A. I will give the amount and date on which each was furnished and the contractor: 49,992 pounds, August 30, Eastman Co., of New York; 50,000 pounds, June 22, Francis Dessoir; 27,984 pounds, May 23, R. C. Williams & Co.; 20,016 pounds, May 7, R. C. Williams & Co.; 25,056 pounds, May 6, Samuel Heyman; 25,008 pounds, May 2, R. C. Williams & Co.; 30,000 pounds, March 24, L. H. Heyman; 1898, all that. While I will not be able to say positively as to these, I think I can give you in each case the name of the packer: This from Eastman & Co.—they are their own packers, pack their own meat; Francis Dessoir and R. C. Williams & Co.—I think all that was from Armour & Co., their roast beef; and that furnished by J. H. and Samuel Heyman was, I think, Nelson Morris & Co.'s.

By Colonel DENBY:

Q. Where does that last firm pack?

A. Kansas City, I think. They are very well known.

By General BEAVER:

Q. And one of the firms—Eastman Co.—pack their own?

A. Yes, sir; and, I think, right in New York.

Q. And the others furnished Armour's beef?

A. Yes, sir, with the exception of the Heymans—Samuel and L. H.—who furnished Nelson Morris & Co.'s beef.

Q. Now, is there an appreciable difference between the brands of these several packers?

A. As submitted in samples?

Q. Yes, sir.

A. A very great difference.

Q. Do the same packers furnish different qualities of canned roast beef—have they different standards?

A. Not to my knowledge. I think Armour has, but I can not say positively. But it may happen very frequently that we might get two or three samples of the same meat—that is, of the same packer—and not know it, because very frequently these dealers submit tins without labels. We don't require labels.

Q. What you want is the stuff?

A. What we want is the beef; yes, sir.

Q. In your experience in the handling of this beef on a cruise, state whether or not, in your judgment, if it is hermetically sealed, the climate is likely to make any difference in it whether you are North or South?

A. Not if properly packed, sir. It might be hermetically sealed and not properly packed.

Q. Yes, of course, if the air is not all taken out before sealing. How long is this meat good after it is opened in tropical climates? How long will it keep?

A. Well, I should think it ought to keep thirty-six to forty-eight hours without any difficulty. You see it is cooked before it is canned.

Q. How is it used in the Navy; that is, how is it prepared for the mess?

A. The meat is cooked in the tin, and it may be eaten either cold or warmed over and made into a soup or stew. In fact, that with mutton forms the basis of soups and stews; and it also may be eaten cold; and it is thoroughly palatable when cold.

Q. Habitually, though, what is the manner of preparing it for the mess?

A. Warming it over and making stews with vegetables—potatoes, if you have any—and making soup.

Q. Is that the most palatable and the way in which you get the best results, in your judgment?

A. I think so.

Q. I mean as to nutrition?

A. I think so; yes, sir.

Q. You have had considerable experience, I take it, aboard ship with these meats?

A. Yes, sir; I issued all of them on board ship.

Q. To what extent have you found them deficient in quality?

A. On board ship?

Q. Yes, sir.

A. Not to any extent. Of course we are bound on all tinned meats to lose a certain percentage through holes in the cans, etc.

Q. Just explain that. How it is possible they can be so bad in quality as to make it impossible to eat.

A. Of course if the air gets to it it rots it. It very frequently happens on board ship that in passing boxes around and putting them into the boats at drill, and getting them out of the storerooms and putting them back, that the wooden casing of the boxes might be knocked off and the tins receive a hole, or the boxes or cans might have what is supposed to be their lacquer knocked off and they rust from getting in contact with water. The cans are supposed to be lacquered.

Q. Then the odor would become apparent?

A. Yes, sir.

Q. Then if you had one can in a box with a hole in the tin, and the beef deteriorated by reason of that, the odor would be imparted to the whole box?

A. Yes, sir; but it would not spoil any other than the one tin.

Q. But it would make an inexperienced person think the whole box was spoiled?

A. Yes, sir. In such a case we hunt for the spoiled box and throw it overboard.

By Governor WOODBURY:

Q. Do you mean the spoiled "box" or tin?

A. The spoiled can.

By General BEAVER:

Q. How is this commercial canned roast beef prepared for shipment—that is, how is it packed for shipment?

A. Well, the specifications which I have just given to General Dodge will give it.

Q. You have 24 pounds in a case?

A. We do not use the standard cans. We require 2 pounds of beef exclusive of the weight of the tins. During the late war we accepted a lot of roast beef in what are called "twos"—what is known as commercially packed beef—but ordinarily we require them to pack it 2 pounds to a can.

By Governor WOODBURY:

Q. Why did you accept the ordinary commercial type, then?

A. Because it takes thirty days to get it prepared as we usually get it.

By General BEAVER:

Q. From your knowledge of this meat ration and your experience with it personally and officially, would you regard it as a good emergency ration for the Army?

A. Well, I do not know. You must remember that I know nothing of the requirements of the Army. It is as if it were a sealed book. It is a good emergency ration for the Navy.

Q. Suppose you landed and went inland for a week, wouldn't you regard this as a good ration for your march in the emergency?

A. Yes, sir; if it were a good roast beef.

Q. Yes; of course. You used it regularly in the Navy as you said, about one day in seven?

A. Well, I might qualify that by saying that at sea we use three days salt meats, and four days tinned meats; and for the tinned-meat ration we have corned beef, roast beef, ham, mutton, and sausage; so perhaps one day in ten would be better. We do not always issue the roast-beef ration out of those five; the corned beef is considered the better ration, and we use it twice as often as roast beef.

Q. In your experience in the Navy had you any serious complaint as to the use of this canned roast beef?

A. No, sir.

Q. How long has it been used in the Navy; do you know?

A. I do not, sir.

Q. From your knowledge?

A. So far as I know, four or five years.

Q. Does it hold its place alongside the other canned meats of which you have spoken as a desirable food for the men?

A. Yes, sir. We believe that those meats are best adapted for use in the Navy.

Q. And a man in the Navy is apt to have the same kind of appetite as a man anywhere else has?

A. Yes, sir; it becomes more satiated in the Navy because we have to use it for days at a time. The food is not very desirable and we get a little tired of it.

Q. You do not have the same variety as is possible on land?

A. No, sir.

Q. To what extent in the ordinary cruise, say, during such an emergency as we had during this last year in our war with Spain, are you able to give rations of fresh meat?

A. It would depend upon the location of the ships. We had fresh meat sent to the Navy in Cuba, the West Indies, Porto Rico, and also to the Manila fleet. We had regular supply steamers from New York.

Q. Do you know what kind of fresh meat was taken?

A. I do not know; that was done directly from the Bureau of Supplies and Accounts and with the contractor. It did not pass through the general store-keeper in New York.

By General DODGE:

Q. Who had charge of that?

A. The chief of the Bureau of Supplies and Accounts; Paymaster Colby, assistant to the chief of the Bureau, had charge of that direct.

By Colonel DENBY:

Q. While I was out I do not know whether you have been asked as to whether this meat was palatable or not.

A. Yes, sir; I should consider it so.

Q. We have had a good deal of testimony on that subject. Did you say you had eaten it often at your mess?

A. Yes, sir.

Q. The other can you recognize as the Armour beef?

A. It looks like Armour's; it is the same sort of cans.

Q. That was the label on it when it came?

A. I fancy it is an Armour can. I can tell you whether we have passed Libby & McNeill's beef.

Q. I wish you would if you can. Here is the label which came on this can [indicating].

A. Armour & Co. Yes, sir; we have used that. Some time, I think, in June, sir, a sample of Libby & McNeill's beef was submitted to the board of inspection and rejected.

Q. Do you know on what grounds?

A. It was very dry and black and did not look palatable; and on November 22 a sample was submitted by Thaddeus A. Kidd, of New York, which I am quite sure was Libby & McNeill's, and that was passed. I think Kidd was the representative of Libby & McNeill.

Q. I will have one of these opened, and your experience will enable you to tell us whether it is equal or above or below the average.

General DODGE. I sent out unknown to anybody and had that bought—not from the contractors, but from stores. It was not selected, and nobody knew what it was for.

By General BEAVER:

Q. Paymaster, the cans which you have opened were cans purchased in the open market from dealers, and not from packers, at random. State, if you please, what, from your experience, is the character of the contents of these cans.

A. I should say both were perfectly good, thoroughly palatable, and I should have no hesitation in passing either one.

Q. Could you tell offhand, or from any figures which you have, about the amount of the annual consumption of this meat in the Navy?

A. Under ordinary circumstances do you mean, sir?

Q. Yes, sir.

A. No; I could not. I should say, perhaps, between—in the neighborhood of 100,000 pounds up to last year.

Q. And during the last year?

A. During the last year I can tell you exactly what we used.

Q. Are you speaking of the entire Navy as a whole or what you bought in New York?

A. I am speaking of what was purchased at the New York Navy-Yard, but that practically covers all that was used. There may have been a little purchased at Norfolk, but I do not think so. Two hundred and twenty-five thousand we purchased in New York during the last year, approximately.

By Captain HOWELL:

Q. Pounds or cans?

A. Pounds.

By General DODGE:

Q. Have you any knowledge as to the use of this canned meat in the foreign navies?

A. No, sir; I do not know whether they used roast beef or not.

By General McCook:

Q. Do you know whether or not this canned meat was used by the marines landed at Guantanamo?

A. Unquestionably so.

Q. You know that?

A. I know they had the navy ration; I can not say positively that they had roast beef, but I know I put on board the *Panther* for the marines a quantity of this roast-beef ration. We were ordered to have so many rations for so many men for so many months.

Q. Have you heard any complaints about that from there?

A. No, sir; none whatever. We have had no complaints about roast beef in the past year, nor before.

Q. Have you any knowledge of the number of refrigerator ships the Navy bought during the war?

A. Yes, sir. We had three refrigerator ships on this side—the *Celtic*, the *Glacier*, and *Supply*—running between New York and Cuba; and I think two at the Philippines.

Q. What was the chief article of their cargoes?

A. Principally refrigerated beef and mutton and vegetables; but in addition, of course, they carried miscellaneous supplies of all descriptions.

Q. Have you heard any complaint about the refrigerated beef on these boats?

A. No, sir; but Paymaster Colby would be able to tell you accurately about that.

WASHINGTON, D. C., January 21, 1899.

TESTIMONY OF PROF. FRANK W. CLARKE.

Prof. FRANK W. CLARKE, having no objection to being sworn, was thereupon duly sworn by the recorder, and testified as follows:

By Dr. CONNER:

Q. Will you be kind enough to state your name, profession, and official position?

A. Frank W. Clarke; chief chemist United States Geological Survey.

Q. You are on duty now where?

A. In the Geological Survey, in charge of the chemical laboratory.

Q. In Washington?

A. Yes, sir.

Q. Please state to the commission whether or not you have made an examination of material submitted to you by Dr. Daly, of Pittsburg.

A. A gentleman presented himself as Dr. Daly at the laboratory this morning and brought with him, sealed up in a small envelope, a brown powder weighing about 4½ grains (if you prefer American measures), and I understood from him that it was the substance which he had submitted to this commission yesterday, with a certain statement concerning its origin.

Q. Was any examination made by you of this material submitted?

A. We examined the material very carefully for boric acid and salicylic acid, and found them both.

Q. Will you be kind enough to state, in such form as you prefer, what examination was made and what the result was?

A. In the first place, for boric acid there are two tests. One of them consists in acidifying the liquid with a little hydrochloric acid, then dipping tumeric paper in it. The effect of boric acid under these circumstances is to impart a red coloration to the paper, which appears as it dries. Here is a slip prepared in that way from the material submitted by Dr. Daly. There is a control slip colored by boric acid, and a very strong reaction is evident. In the second place, when boric acid is mixed with alcohol and the alcohol is burned under proper precautions a distinct green color is imparted to the flame. If your liquid is too diluted you only get a flash of color. We got it several times. We heated and set fire to the hot mixture, then we got at the moment of ignition a very strong flash, and repeatedly. When the solution burned down to the bottom the green flame was continuous. These are two standard tests—the green flame and the tumeric-paper test. For salicylic acid there is practically only one test which is extensively used, and that is by which salicylic acid gives to ferric chloride a strong violet coloration. We tried that test by two or three methods; first, with the solution to which we had been applying the other test, in which we got a strong violet color. Then we took a fresh solution of some of the dry powder and treated it with chloroform, filtered it off, and then evaporated the chloroform solution to dryness. The residue we redissolved in alcohol, and to the solution then obtained we added a drop of ferric chloride. We got then another strong violet color, indicating salicylic acid, and excluding other things which might possibly give a similar color—organic substances. By making this chloroform extract we eliminated everything else which could give color—a strong, unmistakable violet color. We tried three times, and under varying conditions, in order to eliminate any doubt, and we tried the flame test for boric acid, I think, more than three times. The tests leave no doubt. Salicylic acid and boric acid are both present in the sample.

Q. Are you able to form any idea of the amount of these agents in the specimen submitted?

A. No, sir; it would take a very careful quantitative examination to determine that. The test is very tedious, and it would take a long time, and you would have to have much more material than was submitted.

Q. Would you kindly inform us what would be the proper method for a chemist or an analyst in preparing or securing a residuum such as might have been presented to you from beef which had been treated with salicylic and boric acid?

A. I should suppose that the boiling out thoroughly with water and evaporating down to dryness would give sufficient evidence. It would not give all the boric and salicylic acid present, because they are difficultly soluble, but still you could probably dissolve the greater part; by evaporating down to dryness you would obtain it in solid form.

Q. If beef tea was prepared in the ordinary way from beef containing these agents, would it be likely to have in it a large proportion of boric or salicylic acid if such were present in the meat?

A. Beef tea is prepared by two methods. What I should do would be to boil the meat thoroughly with water and then filter, then take the residue and treat it with either chloroform or ether.

Q. The question asked had reference more particularly to the probable amount of these agents that would be extracted in the ordinary process of making beef tea for the sick.

A. I should think a considerable proportion of the amount which is likely to be used for preserving purposes. Large quantities are not necessary as preservatives. Of course such large quantities would be waste of expensive materials.

Q. Does or does not boric acid enter into a combination with any of the materials present in meat and form any combination or borate of anything?

A. I think not.

Q. Under what circumstances is boric acid decomposed?

A. There you touch a technical point. By boric acid is meant a combination of three elements. When you heat it to a high temperature, you drive off the water and the oxide of boron remains behind. There is nothing much more stable than boric acid. Decomposition can only be brought about by the most troublesome method, including the elimination of oxygen, and under no ordinary circumstances can that take place.

Q. We are to understand, then, that it would be practically impossible for such decomposition of boric acid to take place in flesh preserved by the use of boric acid?

A. It would be absolutely impossible.

Q. Do you know whether or not any odor is present in materials treated with boric acid?

A. The boric acid is absolutely odorless itself, and would impart no odor whatever to anything like meat?

Q. Are any of the borates detectable by odor?

A. Not such as are used for preserving agents.

Q. Any that would be produced by the presence of boric or salicylic acids in the flesh?

A. I should think not.

Q. What is the odor of salicylic acid?

A. That is odorless, or nearly so.

Q. Does it form any combinations with flesh which give out an odor?

A. That I can not say.

Q. Is it or is it not difficult to decompose?

A. It is not difficult to decompose, but I can't say what actually happens when it is used as a preservative of food. It is a stable substance, and I should say not likely to undergo any change.

Q. How large an amount of boric acid or salicylic acid would be required to effect the preservation of meat?

A. That I have never looked into.

Q. Speaking generally, do you think a large quantity should be required, or a small?

A. Speaking generally, I think relatively small quantities are used; that is a matter of economy. Of course they use as little as possible. I know in the preservation of beer quite a small amount is used. It is used commonly to preserve beer, also milk, and large quantities are sold for this purpose.

Q. Is it possible that meat which had been kept for a length of time, varying from one to twelve weeks, in cold storage, and covered by cheese cloth, would be affected by either boric or salicylic acid, in the cheese cloth, the cloth having been wet by these agents?

A. I should think it might be possible that the substances would diffuse into the meat. That would have to be settled by experiment. I am not aware of any experiments having been made. It is conceivable; that is all I can say.

Q. Have you ever seen any meat preserved by either boric or salicylic acid or both?

A. No, sir; that is a kind of work I have had nothing to do with.

By General BEAVER:

Q. Doctor, are you familiar with the commercial article known as boric acid?

A. Oh, yes, sir.

Q. Did the sample which you experimented with this morning resemble the commercial boric acid?

A. The material submitted was not a pure boric powder, It was brown, and the pure is white. The powder purported to be a meat extract in which boric and salicylic acids were present, and we found them to be present.

Q. Can a compound of boric and salicylic acid be made without having it extracted from beef?

A. I don't understand you.

Q. You had a powder submitted with salicylic and boric acid in it; can you combine them artificially?

A. They don't combine, and I don't know how they came together.

Q. Can you get them both together?

A. Oh, yes, sir.

Q. So, certainly, it doesn't necessarily follow from what you did that the product which you examined came from beef tea?

A. Not at all. We did not go into the origin of it at all. We were asked to determine whether the acids were present.

Q. I am asking you as a scientist. I don't ask you how it came there at all, but simply whether it is possible to secure a powder like that?

A. It would be perfectly possible to make an artificial powder of that kind.

By Dr. CONNER:

Q. If preservative fluids or preservatives in the solid form are likely and intended to be used for the preservation of meat, would probably a single one of these two agents, boric and salicylic acids, be employed for the purpose, or would the two likely be mixed?

A. They would be, I should think, effective alone, and I can not understand why both should be used together; either would be satisfactory alone.

By Colonel DENBY:

Q. Is there any question of price involved?

A. Boric acid I should think would be cheaper. We do not use salicylic acid in the Survey laboratory.

By General BEAVER:

Q. What is the taste of boric acid?

A. It is practically tasteless. [See qualification below.]

Q. What is the taste of decomposed boric acid?

A. There is no such thing that I know of.

Q. Then, if a man said that beef tasted when first cooked like decomposed boric acid, what would you say of the scientific attainments of that man?

A. I should prefer to leave that to the imagination. I should say, from a scientific point of view, that the expression was meaningless.

Q. Do you think any man ever tasted decomposed boric acid?

A. I think it is doubtful. I should like to have him define what he meant.

Q. If boric acid is tasteless, as you say it is practically, how would the evaporation or dissipation of the oxygen make it taste?

A. If you were to expel the oxygen by a very difficult process, you would get the boron, which might be in two forms, either in a brown powder or hard brown crystals, which are absolutely insoluble and colorless.

Q. Now, Doctor, if boric acid were present in meat, would it impart to the meat, after standing a day, so bitter, nauseous, and unpalatable a taste as to render it quite impossible for use?

A. While I said that the boric acid was tasteless, it does have a faint, bitterish taste, very slight indeed, and you would have to put in a very large quantity, more than is used for practical purposes, to get any taste whatever.

Q. Then, would the standing of meat treated with boric acid for any length of time tend to make it bitter?

A. I should think not.

Q. Would the ordinary taste of boric acid in such quantities as it would be likely to be used continue in the mouth of an individual for a day?

A. No; I don't think any perceptible taste would be left by it.

Q. What is the taste of salicylic acid?

A. As I have never tasted it, I could not say.

Q. Of course, then, you can not tell what effect it might have?

A. No, sir. There is one thing I might say, that if boric acid was supplied, not in the form of acid, but in the form of borax, there might be a slight alkaline taste, such as you get when there is too much soda in biscuits. Possibly if borax were inserted in meat we might sometimes get the taste which would not be in boric acid.

Q. To what extent is borax like boric acid?

A. It is a borate of sodium.

Q. "When detailed to take charge of the transport *Panama* for conveying convalescents to the United States I obtained 2,000 pounds of fresh beef from the commissary at Ponce. It looked well, but had an odor similar to that of a dead human body after being injected with preservatives, and tasted when first cooked like decomposed boric acid, while after standing a day for further inspection it became so bitter, nauseous, and unpalatable as to be quite impossible for use. I was therefore obliged, owing to its condition and the just complaints of the sick about it, and the disgusting odor it emitted when being cooked, and its mawkish, flat taste when served, and the safety of the patients—250 convalescent soldiers on board—to organize a board of survey, condemn and throw 1,500 pounds, all we had, overboard." Now, if there is no taste to boric acid which is perceptible, could the use of it or any quantity of it impart such a taste as described in the sentence I have read to you?

A. I should say not. An excess of borax might give a flattish taste.

Q. But that would be due more to the sodium in it?

A. Than to the salts of sodium.

Q. There is nothing said in this as to the presence of salicylic acid at all, it simply speaks of the case of decomposed boric acid. If the decomposition took place—that is, if you drove the oxygen away from the boron at a temperature of three or four hundred, did you say—

A. Oh, more like two or three thousand degrees.

Q. Then, it would be impossible in the ordinary process of cooking of which you had knowledge to decompose the acid and drive the acid away?

A. Certainly that would be impossible. There is one thing I might say, as a qualification, although it does not bear on the case at all, and that is that boric acid is a very peculiar substance. You may heat it up to a heat required for making porcelain and it practically remains the same, but you dissolve it in water and boil it and it will go off with the steam to a certain extent. In a dry condition it is about as stable as anything can be. When you boil its solution in water, some of it goes off in the steam.

By Dr. CONNER:

Q. But it is still boracic acid?

A. Yes, sir.

By General BEAVER:

Q. It does not decompose?

A. It does not.

By Governor WOODBURY:

Q. Please state whether or not, in your judgment, there would be any difference in the odor or stench that proceeded from decayed beef, whether it had been treated with boric or salicylic acid or not.

A. That I can not say. It would have to be determined by actual experiments. It is conceivable if you had a piece of meat and had an insufficient amount of acid it would decay incompletely.

Q. I mean the difference in the odor?

A. You might get some slight difference in the odor; that I can't say. I don't believe there has ever been any work done to prove that.

By Dr. CONNER:

Q. Are we to understand that this process of decomposition in the meat would occur without in any way affecting the preservative agents themselves?

A. The preservative agent itself, in the case of boric acid, would be absolutely unaffected.

By Colonel DENBY:

Q. Would boric or salicylic acids destroy the flavors of the beef?

A. That I can not say.

Q. Can you tell us what effect it would have on the human health to eat beef injected with boric or salicylic acid?

A. The general opinion now is that boric acid is relatively harmless, but salicylic acid is objectionable, and it is prohibited by law in most countries of Europe for preserving beer, etc., as being unwholesome.

Q. Do you not believe that the use of boric and salicylic acid in beef would be detrimental to the health of the troops?

A. I should think the amount of boric acid used would be of very little account in that respect; the salicylic acid would be objectionable.

Q. Can you tell us how it would affect the digestive organs?

A. Salicylic acid when used continuously is apt to upset the stomach, I think, although I am not a doctor. They frequently find that in using it for rheumatic troubles it upsets digestion, and its use has to be discontinued.

Q. Would it make a man vomit?

A. I think that is one of the commonest symptoms of an upset stomach.

Q. If a man ate beef treated with it would it injure him?

A. If you got too much and repeated it continuously.

By Dr. CONNER:

Q. Supposing a person has eaten of this preserved meat but once, is it possible, think you, that he would be nauseated and vomit in consequence of eating flesh not having undergone decomposition, but treated with this acid?

A. I know that salicylic acid is used by physicians all the time in much larger quantities than you would eat at any one meal. Such doses do not upset the stomach. It is when taken in continuous, relatively large doses that the mischief is done.

Q. You believe, Doctor, that in order to preserve the meat by the process of injecting chemicals, especially in tropical climates, you would have to use a great deal of acid, would you not?

A. I hardly think it would be necessary to use much more than under ordinary circumstances.

Q. Do you believe it would preserve the meat?

A. I can't say positively, but I think there would be very little difference.

Q. That is, the preservation of the meat?

A. I don't think it would take very much.

Q. The question is, whether beef with nothing in it would keep as long or longer by the refrigerated process than beef injected with chemicals?

A. As long as it is kept in a refrigerator it can be kept indefinitely. Let me illustrate. They send frozen mutton from Australia to England in shiploads.

Q. What I want to get at is whether there would be any advantage in treating with secret chemicals meat that is to be sent to the troops in refrigerated cars or ships?

A. That I can't say; it would be better for you to consult some specialist in food products for that.

Q. You can tell what the effect of preservatives would be?

A. The effect would be to keep it longer. There is this problem: The meat may be carried to the troops refrigerated; then, when taken out, it might not be used immediately, and in a climate where putrefaction takes place immediately the effect of preservatives would be to retard that putrefaction.

Q. And practically make the beef last longer?

A. Yes, sir; after it is taken out of the refrigerator.

Q. If it was delivered from the refrigerator and used immediately there would be no object in putting chemicals in it?

A. No.

Q. If the meat was to be kept twenty-four hours after leaving a refrigerator, would you regard the chemicals as of any use whatever?

A. I should say they would retard the putrefaction to a considerable extent.

Q. Can you present to the commission a report of your investigation made this morning upon the material that was submitted to you?

A. [Hands report to Dr. Conner.]

Q. Is this the report you desired to submit as a part of your testimony?

A. Yes, sir.

DEPARTMENT OF THE INTERIOR,
UNITED STATES GEOLOGICAL SURVEY,
Washington, January 21, 1899.

SIR: In accordance with your request we have examined the powder submitted by Dr. W. H. Daly for boric and salicylic acids. Both the flame test and the turmeric paper test give distinct evidences of the presence of boric acid. We submit herewith the slips of turmeric paper showing the red coloration given by the sample examined, and also a slip showing the reaction obtained by boric acid alone. We also obtained good reactions with ferric chloride, showing the presence of salicylic acid in the powder.

The total weight of the sample submitted was 0.2836 gram. Of this, 0.1536 gram has been returned to Dr. Daly, in whose presence the tests were conducted.

Very respectfully,

F. W. CLARKE, *Chief Chemist.*
W. F. HILLEBRAND, *Chemist.*

Dr. P. S. CONNER.

WASHINGTON, D. C., *January 21, 1899.*

TESTIMONY OF PAYMASTER HENRY G. COLBY.

Paymaster HENRY G. COLBY appeared before the commission, was sworn, and testified as follows:

By General BEAVER:

Q. Please give us your name and rank.

A. Henry G. Colby, paymaster, United States Navy; at present Acting Chief Bureau of Supplies and Accounts. I am acting chief in the absence of the Paymaster-General, who has been sick some little time.

Q. And stationed in Washington?

A. Yes, sir.

Q. We have had in a general way, Paymaster, the duties of the Paymaster's Department from Paymaster Hicks. We wish to interrogate you especially as to what purchases of fresh beef have been made by the Navy during the war with Spain and how it was shipped, and all about that part of the supplies furnished.

A. Our fresh beef has been purchased in the quarters from two to three hundred thousand pounds at a time, and a like amount of vegetables, and with that about 500 tons of ice. This has been placed on refrigerating steamers—steamers that were purchased by the Government, which formerly ran between Australia and London in that business. Their refrigerating capacity is somewhere about 1,200 tons.

Q. Do you know from whom the beef was purchased?

A. We usually sent out six bids, as follows, as I recollect them: Swift & Co., Armour & Co., Armour Packing Company, Nelson Morris & Co.—that's four; Eastman's Company, New York—that is five; Schwarzschild & Sulzberger Beef Company—they are in New York, on the east side. They are the six largest of the companies of that kind in the country, and do a large business in the way of freezing beef and sending it abroad.

Q. You might just follow that up and say to whom contracts have been allotted.

A. They have been given to the lowest bidder. I have the specifications here under which they have been purchased. These people have been addressed in this way: (Paper here filed and marked Exhibit H, G, C, No. 1, January 21, 1899.) [Paper read to commission.] Then ice—there was simply 500 tons of ice of more or less best quality.

Q. Has the Navy been furnished with fresh beef during the war with Spain under practically similar specifications?

A. Yes, sir.

Q. What has been the character of the beef so furnished?

A. Excellent. I not only state so from the inspection, but it has been spoken very highly of by the people on the coast of Cuba—our people—as being the finest beef they could wish for there.

Q. Have there been any complaints from the officers or men in the Navy itself in regard to the beef?

A. None whatever.

Q. Has that beef been used in tropical climates?

A. Yes, sir.

Q. Can you give us from your recollection, or from statistics in your possession, the names of parties to whom contracts have been allotted under these or similar specifications?

A. I think they have been allotted to nearly everyone of those six firms.

Q. At different times?

A. Yes, sir. These bids have been sent out and opened either by the Bureau or the pay office in New York. Many times I have been there myself and opened the bids. They invariably were given to the lowest bidders.

Q. And sometimes the bids were by one of these firms and sometimes by others?

A. Yes, sir. There has been a great deal of competition; there has been close bidding. This meat I have been reading about was a small amount; it was simply to send to Havana.

Q. Has that been allotted?

A. Yes, sir.

Q. Do you know to whom?

A. Nelson Morris & Co.

Q. That is the Kansas City firm?

A. Yes, sir. They have a large establishment in New York.

Q. Have these parties, all of them, establishments in New York, from which shipments can be made at any time?

A. Yes, sir.

Q. Have you any knowledge, direct or indirect, or any suspicion, based on any facts which have been communicated to you, of the use of artificial means for the preservation of the meat other than such as would be used in freezing or refrigerating beef?

A. No, sir. The only time that ever anything of that kind has been spoken of—this is simply as I remember it—someone—I am not prepared now to even say who it was—appeared at the Bureau in the early part of the war and suggested that they could furnish us, or they had a patent or some process of treating beef so that it would keep an indefinite time, but we paid no attention whatever to it; never thought of accepting it at all; and for that reason it has escaped my mind further than that I recollect the circumstance and don't know who it was?

Q. Did you know his name at the time?

A. I did, I think.

Q. Was it Powell?

A. I am under the impression it was. Still, I would not testify positively as to that, because I simply recollect the circumstance. I did not think it would ever be called to my attention again. At any rate, we had not any idea of adopting it.

Q. The Navy has never adopted any plan of chemically treating beef?

A. Never.

Q. What knowledge have you as to the commercial article known as canned roast beef?

A. Well, I have in my experience in the Navy issued a great deal of it.

Q. Did you ever use any of it at your mess?

A. Oh, yes. Before I came to the Bureau, which was the 1st of last February; I had just left the battle ship *Indiana*, where I had served twenty-six months, and that was part of the ration.

Q. In what proportion is it issued?

A. Well, we have—

Q. How does your supply table provide for it?

A. This is the supply ration for the men (referring to paper). It makes a very good soup. We have in the service several kinds of canned meats.

Q. Can you tell us just how they are issued; take ten days for example?

A. I will tell you in that connection—among this list are roast beef, which you referred to, corned beef, ham, mutton, and sausage.

Q. All in cans?

A. Yes, sir. We usually issue—we change about those meats and issue from once to twice a week all that list. Sometimes it is ham; sometimes roast beef; sometimes corned beef, etc. The number of times we issue it depends on how often we issue fresh beef. Sometimes we have no excess of fresh beef and issue salt meat; sometimes salt meat once a week, and pork is issued once a week, and this tinned meat twice a week; once or twice a week fresh beef, as the case may be.

Q. Is it possible that this canned roast beef will be issued once in a fortnight?

A. Oh, yes, sir.

Q. Has it been satisfactory diet in the Navy?

A. Yes, sir; it has been a satisfactory article.

Q. As to your personal experience, has it been satisfactory or otherwise?

A. Thoroughly so.

Q. How has it been issued in your mess?

A. I would state that for twenty-six months that I was on board the battle ship *Indiana* I don't know of any of it having been condemned. Of course there are cases perhaps where a tin now and then may be found where in boxing they may

have driven a nail in it, or it may have been badly soldered, in which case, of course, it is a failure, and we usually detect this by what we call "swelled heads."

Q. The introduction of air would cause fermentation and consequent swelling?

A. Yes, sir.

Q. One can or one package in a box with others would not necessarily contaminate or injure the others?

A. No, sir; if the others were perfect tins.

Q. That is, had been properly prepared and hermetically sealed?

A. Yes, sir.

Q. An inexperienced person might condemn the box because of the smell of one imperfect one in that box?

A. Yes, sir.

Q. I think you spoke of having used it largely for soup?

A. Yes, sir; I think it is largely used for that by the men and officers whenever used at all.

Q. Is it used in any other way?

A. Oh, yes; it has been served up in making cruises at sea. Formerly on our sailing ships they were largely dependent on that kind of meat.

Q. Used as a stew with vegetables?

A. Yes, sir.

Q. How would you regard that as a suitable part of the meat ration for forces serving on land where they could not conveniently get fresh meat?

A. I should say it would be a very good substitute. I should be inclined to recommend that list of five.

Q. They use the corned beef also in the Army?

A. Yes, sir.

Q. And mutton to a limited extent?

A. Yes, sir. Each one would have its use with me if I had my way.

Q. Would you regard it as a proper article for diet for what some commissaries have called an emergency ration; that is, to be used in an emergency, to be kept and carried along as the necessity required?

A. Yes, sir.

Q. Coming back to the refrigerated beef, as it is called in commercial life, state whether or not that is inspected at the time of its delivery?

A. It is, sir.

Q. So far as your knowledge extends has that inspection ever disclosed the presence of chemicals for its preservation?

A. Never.

Q. Have you ever heard of any suspicion of the use of chemicals by any of these firms which you mentioned in the preparation of their meat?

A. Never.

Q. Has any representation of that kind, so far as you know, ever come from the Navy in the issue of the meat so delivered?

A. No, sir.

Q. When taken out of the refrigerator ship and taken aboard the vessels for consumption, what is the life of it as wholesome food—how long does it last?

A. When taken from the refrigerating vessel it is thoroughly frozen, and in delivering it we deliver 2 or 3 pounds of ice to one of beef, and when it is received aboard the ship where it is to be issued it is placed in a large ice chest and will keep three or four days.

Q. You have better facilities than they have in the Army for this purpose?

A. Oh, yes. The larger battle ships have a small refrigerator plant of their own. They make their own ice, and can keep meat two or three months if necessary; that is, a limited amount.

Q. So you have these refrigerator ships to sail to a particular point or sail with the fleet to supply it?

A. Yes, sir. The supply steamer *Glacier* has lately arrived in New York. She had beef left on board of her that was placed in her refrigerating compartments the 18th of July, and the beef is in perfect order—not the slightest discoloration or anything of that kind. It has been kept frozen perfectly hard all the time. The temperature of our refrigerators is kept at from 18 to 20 degrees. On board that particular vessel we can run the temperature down to zero.

Q. As a matter of curiosity, how are these refrigerators kept down to such a low degree of temperature; by the use of ammonia?

A. No, sir. My impression is that they are compressed air; I have never examined them closely. They are English ships, you know, and they are built for carrying large quantities of beef for long distances through the tropics, from Australia to Europe.

Q. Have you the contracts for the beef?

A. No, sir.

Q. Can you furnish us with copies?

A. Yes, sir; I will furnish a list of contracts for beef. We have about, since the 1st of March last, I should say, 300,000 pounds of roast beef; 450,000 corned beef; 440,000 hams; 365,000 mutton; 450,000 of sausage.

Q. All canned?

A. Yes, sir.

Q. And have you the amount of fresh beef?

A. No; I haven't that.

Q. That you will furnish, and also the firms?

A. Yes, sir.

NAVY DEPARTMENT,
BUREAU OF SUPPLIES AND ACCOUNTS,
Washington, D. C., ———.

Please quote the lowest figures at which you will deliver alongside the United States supply steamer *Glacier*, at New York Navy-Yard, on four days' notice, the following articles, conforming with the usual requirements and subject to naval inspection, including the entire handling, delivery on board, and the proper stowage in the cold-storage compartments of all the articles on which you are asked to submit figures:

	Unit price.	Total.
Beef: ——— pounds, more or less, good steers of the best quality; carcasses weighing not less than six hundred and fifty (650) or more than seven hundred and fifty (750) pounds, in the proportion of three hind quarters to two fore, free from bruises; stags, bulls, and cows excluded; carefully wrapped in white muslin; to be thoroughly frozen when delivered; all quarters not sufficiently frozen to prevent the insertion of a knife will be rejected		
Mutton: ——— pounds, more or less, best quality; carcasses to weigh not less than thirty-five (35) or more than seventy (70) pounds (lights and livers excluded), free from bruises; no bucks; wet or dry ewes accepted; each carcass to be wrapped in white muslin; to be fully frozen, as specified in the case of beef		
Vegetables: ——— pounds, more or less, to be strictly fresh and of the best quality; to be supplied at the following proportions, viz, four-fifths ($\frac{4}{5}$) Irish potatoes; one-fifth ($\frac{1}{5}$) white onions; to be delivered in properly ventilated barrels		
Ice: ——— tons, more or less, of the best quality		
Total		

MEMORANDUM.

Beef and mutton purchased for the Navy.

	Beef.	Mutton.
	<i>Pounds.</i>	<i>Pounds.</i>
May 7, 1898: Purchased from Armour & Co., Philadelphia.....	86,599	5,774
June 11, 1898: Purchased from Eastmans Co., New York.....	277,750	9,917
July 20, 1898: Purchased from Eastmans Co., New York.....	309,775	20,528
July 21, 1898: Purchased from Nelson Morris & Co., New York.....	71,771	5,089
Aug. 15, 1898: Purchased from Armour Packing Co., New York.....		25,025
Oct. 8, 1898: Purchased from Nelson Morris & Co., New York.....	226,701	25,673
Total.....	972,596	92,006

WASHINGTON, D. C., *January 23, 1899.***TESTIMONY OF DR. DANIEL E. SALMON.**

Dr. DANIEL E. SALMON, being duly sworn, testified as follows:

By Dr. CONNER:

Q. Doctor, will you be kind enough to state your name and the official position you now hold?

A. Daniel E. Salmon; Chief of Bureau of Animal Industry.

Q. You have been, in the course of your official duties, occupied with the matter of the investigation of the beef as prepared for shipment to various points?

A. The inspection of beef comes under my department.

Q. Kindly tell us in brief the character of that inspection and what is to be ascertained by the inspection.

A. The inspection is to determine whether the cattle are healthy at the time of slaughter and whether the meat is wholesome and fit for food. Inspection is made before the animal is slaughtered and again at the time they are slaughtered.

Q. In what percentage of cases is it found that the animals are so diseased as to render them unfit for use?

A. I could not give the percentage.

Q. Approximately?

A. It is a very small percentage.

Q. Does it come under the province of your department and is it the duty of your inspectors to ascertain whether or not this meat as shipped is in a condition to be properly used for food?

A. As a rule they do not follow the meat after it is slaughtered; it is then marked for identification.

Q. Have any investigations been made bearing upon the condition of the beef—any minute investigation?

A. We have a microscopic inspection of pork, but none of beef.

Q. Have you had occasion there, either officially or in your individual capacity to investigate the character of the meat that has been supplied to the Army of the United States?

A. No, sir; not specially.

Q. Have any investigations been made by your department to determine what the character of fresh meat is, first, and then canned meat, that is put upon the market?

A. Not by my Bureau. I understand there has been some by the Chemical Division of the Department.

Q. Have you yourself made any investigations that you are prepared to report on to us?

A. As to the character of the meats?

Q. Yes, sir.

A. No, sir; not beyond our official inspection at the time of slaughter.

Q. How many inspectors have you, sir, under your orders?

A. We have from 160 to 175 professional inspectors.

Q. Is there present at every large packing house an inspector of your Bureau?

A. Possibly not every large packing house. We are inspecting at 135 (that was the number last year) of the largest packing houses.

Q. Does that number include, think you, all the firms that have furnished meat to the United States Army during last year?

A. I could not say.

Q. Is it probable that it does?

A. I think it is possible they purchased of other firms, although some time before the war broke out the Department of Agriculture invited the attention of the War Department to the inspection of beef carried on by the Agricultural Department, and suggested that they only buy such beef as had undergone our inspection; and we were informed by the War Department that such instructions had been issued in all cases except in an emergency.

Q. Do you know whether or not those orders have been obeyed as well as issued?

A. I do not know.

Q. Have you had inspectors at the slaughtering houses of the following firms: Armour, at Chicago, at Kansas City, and at Omaha; Libby & Co.; Nelson Morris & Co.; Eastman Co., of New York; Swartzchild & Sulzberger; Swift & Co.; Hammond & Co., and Goodey's, in Kansas City?

A. Yes, sir; we have inspection at all of them.

Q. Have the reports received from your inspectors been favorable as to the character of meat examined by them?

A. We do not get the reports like that. We get reports as to the number of carcasses condemned. As I said, only a small percentage is condemned on account of being diseased.

Q. What is the character of the diseases?

A. Any that causes a fevered condition of the whole carcass.

Q. Kindly mention some.

A. We mention in our instructions to inspectors such diseases as tuberculosis, actinomycosis, and the fevers and conditions that raise the temperature of the animals, and any cancers or inflammations of the vital organs or processes, or advanced conditions of pregnancy.

Q. Then, so far as—speaking generally—the meat is passed by your inspectors, is it fit for use?

A. Yes, sir.

Q. And beyond that, as I understand, you know nothing about the course of it?

A. Well, I should not say we do not know anything about the course. Our men are in the abattoirs and see the meat and certify to it as it goes out. But the certificate is simply to cover the fact that the animal was healthy when sent out.

Q. Has any official or any other report been received by your Bureau to the effect that meat intended for sale was treated by chemicals at the packing houses before shipment?

A. That refers to beef, I suppose?

Q. Fresh beef and canned roast beef.

A. I never received any report of that character.

Q. Have you ever heard of beef of the character or the kinds mentioned being treated by either boric acid, salicylic acid, nitrate of potash in large quantities, or any deleterious agency?

A. None of the beef as packed in the houses where we have inspection.

Q. Is it likely that had such agents been used your inspectors would have reported it to the Bureau?

A. I think so, if used in large quantities; but it might be used in a small quantity without coming to their attention.

Q. Have your inspectors free access to every part of these establishments?

A. Yes, sir.

Q. They are familiar with all of it?

A. Yes, sir.

Q. The inspection takes the animal on the hoof and ends when the animal is cooling?

A. Yes, sir.

Q. And during those stages of preparation all parts of the establishment are open to your inspectors?

A. Yes, sir; all parts; the cooling rooms and the parts; but of course a packing house is a very large concern, and there might be something done in it which our inspectors did not see, especially as to curing, which they do not inspect.

Q. Is it likely that any such process could have been carried on to any extent without your examiners being aware of it?

A. I do not think so.

Q. Do you know whether or not the Department of Agriculture has carried on under its orders any investigations as to the food value of the various meats that are sent out, especially beef?

A. I understand the Experiment Station Division has paid some attention to that, but I am not officially familiar with that.

Q. Are you familiar with the action of chemical agents, such as boric acid and salicylic acid, upon the health of individuals using these agents?

A. Well, not specially. I should not want to consider myself an expert on that subject, because it has not come under my attention particularly.

Q. Do you feel qualified to express a positive opinion as to the probability of the eating of a single specimen of meat prepared with boric acid giving rise to nausea and vomiting?

A. No, sir; I should not care to give an opinion on it.

Q. Are you familiar with the composition of boric and salicylic acid?

A. I am familiar with the substances.

Q. Will you be kind enough to tell us what the odor is of boric acid and what it is of salicylic acid?

A. I do not think they have any odor.

Q. Will you be good enough to tell us whether boric acid, when brought into contact with flesh and injected into beef, will or will not decompose?

A. I should not suppose it would decompose; but I have never made any experiments with it or observed its action.

Q. Under what circumstances does boric acid decompose or resolve into its constituent elements?

A. I should not want to answer, not being a chemist.

Q. Did you ever know, as a scientific man, of boric acid having undergone decomposition?

A. No, sir; I do not know that I have.

Q. You would therefore not be familiar with the taste produced by eating meat in which decomposed boric acid was present?

A. No, sir.

By General DODGE:

Q. At what stage of the refrigeration of the beef do you tag and brand it?

A. Tag it almost immediately after it is killed, before it goes into the coolers although sometimes it is tagged after going into the coolers.

Q. And you stated that they give a receipt or certificate for it when it is shipped?

A. Yes, sir.

Q. That is, when it is loaded from out of the building?

A. Yes, sir.

Q. What is the certificate?

A. That the animals were sound and healthy and the meat wholesome at the time of inspection.

Q. Have you any knowledge of any packing establishment in the United States that treats fresh beef chemically?

A. No, sir.

Q. Never have heard of any?

A. I have heard of it being tried experimentally, but I never heard of it being done on the regular output of an establishment.

Q. Will you state how many people are engaged upon the meat industry of the country in your establishment?

A. We have from 160 to 175 inspectors, professional inspectors, veterinaries, and they have as assistants about as many more people who are called stock examiners, taken from butcheries and packing houses, who know all about beef. They are assistants to the inspectors, but the inspectors pass on them.

Q. What are the assistants; experts in what?

A. Men familiar with the appearance of meat, and they assist the inspectors in various ways. Some have been butchers and others are men who have worked in packing houses. They look about and call the attention of the inspector to any unusual appearance of the beef or color.

By Dr. CONNER:

Q. You spoke of these assistants. Do the inspectors actually see the beef or do they take the statements made by these assistants?

A. They see the meat themselves.

Q. In all cases?

A. Yes, sir.

By General WILSON:

Q. Are these inspectors and subinspectors appointed under the Civil Service Commission, and do they pass an examination?

A. Yes, sir.

By Colonel DENBY:

Q. Have you a copy of the instructions to inspectors?

A. Yes, sir; and I have a copy of my annual report, which gives the statistics of the meat trade.

Q. We would like to see those instructions?

(Witness produces same.)

By General BEAVER:

Q. What stamp does the inspector put upon each quarter of beef and where is it stamped?

A. There are two ways of marking beef. One is to put a cardboard tag on it, which has "The United States Department of Agriculture; Inspected Beef." That is fastened with a wire and a lead seal. In other cases they stamp with a rubber stamp and specially prepared ink.

Q. On the covering?

A. On the meat itself.

Q. On the flesh?

A. Yes, sir.

Q. Which mode of marking is in greater vogue?

A. For the interstate trade they use the stamp more largely, and the foreign the other.

Q. A manila tag with a wire attached to it and a leaden seal?

A. Yes, sir.

Q. Is it an indictable offense to simulate that seal?

A. Yes, sir.

Q. As to the stencil, is it criminal to simulate it, too?

A. Yes, sir; any marks for the identification of meat.

By Colonel DENBY:

Q. Where would you find the law?

A. In the regulations, of which I gave you a copy.

By General DODGE:

Q. Have you any information to give us yourself in relation to this matter; is there any information you can give us upon the subject about which we have not questioned you?

A. No, sir; I don't think there is. I have not called for any special reports from my inspectors on this subject, and I have had none made to me from them.

WASHINGTON, D. C., *January 24, 1899.*

TESTIMONY OF MAJ. RUFUS M. TOWNSEND.

Maj. RUFUS M. TOWNSEND then appeared before the commission, and the president thereof read to him the instructions received by the commission from the President of the United States, indicating the scope of the investigation. He was then asked if he had any objections to being sworn, and replied that he had not. He was thereupon duly sworn by the recorder of the commission.

By General BEAVER:

Q. What is your name and rank?

A. Rufus M. Townsend, major, commissary of subsistence, U. S. Volunteers.

Q. Have you occupied the position of commissary of subsistence according to your rank during the war with Spain?

A. Not all the time. I came out as first lieutenant of Company C, Second New York Volunteers, and on the 12th of May last I was detailed to the commissary of subsistence on the staff of General Snyder's division, Fourth Army Corps, and I served as acting chief commissary of that division until the 15th of July, when I was commissioned as major and commissary of subsistence.

Q. In what places or camps, and with what troops have you served during the war?

A. I started out as first lieutenant in my regiment in Camp Black, in Long Island, in the State of New York. I remained there in connection with my company and regiment till we went to Chickamauga. I was there something like two or three weeks, when we went to Tampa. In the early part of May, immediately on reaching Tampa, I was detailed as chief commissary of General Snyder's division, and have never been back to the regiment. During the time I was with the Second New York I was in touch with my regiment.

Q. Tell us as to your subsequent service as commissary.

A. I served in Tampa as chief commissary of the Second Division, Fourth Army Corps, from the 12th of May until, I think, the 28th day of July. I was relieved and was placed in charge of the *Segurança* as quartermaster and commissary until the latter part of August, when I was for a short time in New York; then I was ordered to Huntsville, and was chief commissary for the same division for some little time. I was then chief commissary of General Chaffee's division. I am now on leave.

Q. What have been your opportunities for observing and inspecting the issues of fresh refrigerated beef and canned roast beef during your term of service, both as a line officer and a staff officer?

A. In Camp Black we ate the beef, both canned and fresh, every day, three times a day. On the train from Camp Black to Chickamauga we used it as a traveling ration, particularly the canned beef, both corned beef and roast beef, and in Chickamauga we used it very considerably, because for several days after we got into Chickamauga we did not get fresh beef. We were so located that we did not get it. But after several days we got plenty of fresh beef. I ate it and saw it issued to the company.

Q. Did you inspect the company kitchens?

A. Yes, sir; repeatedly—several times a day.

Q. And saw what was being done by the men?

A. Yes, sir; and I ate it myself. Then, after I got to Tampa I saw it there and ate it. Then, after I went onto General Snyder's staff, acting under instruction, when the brigade commissaries drew their rations I went out at every issue and personally inspected it. I do not remember of an issue that I did not personally inspect. After while they were loading transports to send to Cuba, and Colonel Weston asked me if I would go down to Port Tampa and assist him in loading the beef, which I did. I spent the better part of a week or ten days, I should say, in loading them, and from that time up to the present I have considered it my duty, and more particularly under the instruction of the Commissary-General in the latter part of October, I think, to personally inspect all the meat. It was my duty also to ride around through the regiments of the division and look into the company kitchens, and look at the rations on hand and see what condition they were in, and make such report as I saw fit to my commanding general.

Q. What experience have you had in your own division with the so-called canned roast beef and fresh beef?

A. A good part of the time we drew fresh beef rations from the contractor, and more particularly in Tampa, and I personally ate a good deal of canned beef in stews, soups, and hash, day after day, and saw quite a good deal of it.

Q. What has been your experience in general as to the character and quality of the refrigerated fresh beef issued to the Army and of the canned beef of which you speak, speaking of them separately?

A. The fresh beef, so far as I am able to judge, was excellent. I never heard any complaint from anybody. The canned beef was excellent, and I never heard any complaint of that. Occasionally cans were bulged and some spoiled, but no considerable quantity—none worthy of the name.

Q. Have you ever known, either by direct inspection or from the reports of other officers or soldiers, of any of the fresh beef being preserved by the use of chemicals?

A. I never heard of such a thing until I saw it in the newspapers.

Q. Was it possible to have been used without your seeing or hearing of it during all that service?

A. Why, it might have been; I would not say it was not.

Q. Was it likely?

A. I should not think so; that would not be my impression.

Q. Do you know what the action of the so-called preservatives, boric and salicylic acid, is?

A. Only in a very general way.

Q. If there was any complaint, what was it—that it was preserved, or that when taken from the can and exposed to the air it became tainted on the outside and changed color, etc.?

A. That is in relation to fresh beef?

Q. Yes, sir.

A. Well, I could not really say that I ever heard of any complaint at all, personally. The only complaint I heard was from hearsay, and that was from officers in Porto Rico, who said the beef was sometimes taken from cold storage and not cooked in time and the climate spoiled it, but almost everybody that I talked with said that if washed and taken care of it never would have spoiled. If you will permit me to say, when put on the *Segurança* I was put on inspecting duty, and the fact that she was coming into Tampa was not known.

Q. Was it a transport?

A. Yes, sir. We had on the *Segurança*, I think, in the neighborhood of 20,000 pounds of fresh beef, which was furnished in almost a moment's notice, and it lasted well all the way up through to New York. We had six or eight hundred wounded men, and it was all put on at a moment's notice.

Q. Were you on the *Segurança* from the time you left Tampa?

A. Yes, sir; until I went to New York in the latter part of July.

Q. That was on the return of the *Segurança* from Santiago?

A. Yes, sir.

Q. It touched at Tampa?

A. No, sir; it did not. It went into Egmonte Key, just below Tampa Bay. It was in quarantine, and they would not let it come up. I went down aboard and took charge and was acting quartermaster in charge of the vessel.

Q. You found on the *Segurança* what men—wounded or sick?

A. Comparatively few wounded. They were largely sick men. Some had had yellow fever, but most had either typhoid or pernicious malaria fever; a large number of enlisted men, officers, teamsters, and civilian employees.

Q. Will you kindly say (producing a can of meat) whether that meat resembles in outward appearance the canned beef that was furnished the Army, so far as your knowledge of it goes?

A. Yes, sir; it seems to me it is. I don't see any particular difference.

(Indorsement on can): Received from Maj. Gen. N. A. Miles, U. S. A., January 23, 1899. Taken from express package opened in General Miles's office in my presence. S. C. Mills, recorder. Label No. 2.

(Can opened in the presence of the commission by the recorder and ordered to be analyzed by the Government chemist.)

WASHINGTON, D. C., January 26, 1899.

TESTIMONY OF HON. RUSSELL A. ALGER.

Hon. RUSSELL A. ALGER, being duly sworn, testified as follows:

By General BEAVER:

Q. Would you have any objection if I called you "General" instead of "Mr. Secretary?"

A. Prefer it, sir.

Q. General Alger, will you please give us your full name and your present position in the Government?

A. Russell A. Alger, Secretary of War.

Q. When were you appointed Secretary of War?

A. At the beginning of this Administration, sir.

Q. Fifth of March, 1897?

A. Fifth of March, 1897; yes, sir. I believe that is the date.

Q. Were you on duty in your office from the time of the passage of what is known as the national defense fund act, say the 9th of March, until the declaration of war with Spain?

A. Yes, sir; constantly.

Q. Have you been actively on duty from the time of the declaration of war until the present time?

A. Yes, sir.

Q. State, if you please, General, how the heads of the several departments or bureaus of the War Department are appointed; whether by seniority or by designation of the President, or in what manner.

A. They are appointed, as a rule, as I understand, by seniority, but that rule could be broken by the President should he see fit to appoint others instead.

Q. What has been the rule on that subject since you have been in charge of the War Department?

A. I should say that the rule of seniority has, I think, been carried out.

Q. That is, the rule of seniority has prevailed?

A. Yes, sir.

Q. Can you recall when the first application was made by you to the President for a designation of the national defense fund, so called, which became available, as we understand it, the 9th of March, 1898, and to what extent such application was made and for what purpose?

A. Immediately upon the defense fund being available the efforts of the Department were specially made toward strengthening and increasing the coast defenses, sir; the funds for same largely going to the Chief of Ordnance and the Chief of Engineers. I have, sir, anticipating possibly the asking of these questions, ordered a list of the expenditures from the defense fund made out, which I have with me.

Q. Of the national defense fund?

A. Yes, sir.

Q. If you have a schedule of that sort it will save us making special inquiries, and we would like to have it made part of your testimony here before us.

A. When I was notified I would be called here I caused these to be prepared, thinking, presumably, they might be required. [Produces papers.] These statements I believe are correct. They were taken from the books of the Department.

Q. And can be made part of your testimony?

A. Yes, sir.

Q. I will just give the stenographer a little tab on each one: One from the Surgeon-General's Office, Washington, January 20, 1899, being a memorandum submitting the disposition of the moneys allotted from the special emergency appropriation for national defense, with the data of expenditure.

(This paper was marked "Exhibit A, January 26, 1899, J. C. M.")

Same from the Paymaster-General's Office, same date, marked "Exhibit B, January 26, 1899, J. C. M."

Same from the Chief Signal Officer's office, same date, marked "Exhibit C, January 26, 1899, J. C. M."

Same from the office of the Chief of Ordnance, with the request therefor of the Adjutant-General, dated January 19, 1899, marked "Exhibit D, January 26, 1899, J. C. M."

Same from the Chief Engineer's office, dated January 20, 1899, marked "Exhibit E, January 26, 1899, J. C. M."

Same from the Quartermaster-General's Office, a memorandum without date, but in response to a request of the Adjutant-General of the 19th of January, 1899.)

The WITNESS. Please date that the same. They were sent practically at the same time.

(Paper last above referred to marked "Exhibit F, January 26, 1899, J. C. M.")

Q. General, to what extent were you kept advised of the details of the several bureaus of the War Department during the continuance of the war?

A. Well, I think, sir, fully. The chiefs of bureaus were in my office sometimes

many times a day; I presume nearly every day all of them—certainly if they had anything that required any further action than authorized by the orders that had been already issued.

Q. The orders affecting the several departments were issued from the Adjutant-General's Office, who was in direct communication with you constantly?

A. Yes, sir; by my order.

Q. If there were any special difficulty in any of the departments were you kept advised?

A. Supposedly so, sir.

Q. If you were not advised of the difficulty, upon whom would the responsibility for failure rest?

A. Well, I should blame the head of the department—of any department. I would censure him very severely if he took the responsibility upon himself in failing to report to me any serious abuse.

Q. In the correction of abuses without communicating with you?

A. Yes, sir.

Q. If abuses existed and no remedy were applied and no information conveyed to you, where would the responsibility rest?

A. What do you refer to?

Q. In general, in any of the departments; if there was a weak place in the department and the head of that department refused to apply the remedy which was needed, and did not communicate either an abuse or a failure to you, where would the responsibility for that rest? Take the Surgeon-General's Department, or the Quartermaster-General's, or any of the departments.

A. With the person who neglected his duty; with the heads of the different departments.

Q. If weakness or abuse developed during the course of the administration, did you interrogate the heads of the departments as to that, or did you regard it as their duty to come to you with whatever might be necessary in their department?

A. When I would receive a report from any source worthy of attention to the effect that the affairs of the department were not carried on as they should be (according to that report), I would inquire at once, and usually find the report was groundless. Sometimes, of course, in an undertaking so vast and on such short notice, and in so short a time, there would be many hitches that could not be avoided. Many things occurred in the delay of transportation possibly, and the procuring of tentage, camp outfit, clothing, etc.; and that was remedied just as rapidly as the material could be produced. There is no doubt that in the early part of the war, with 125,000 men coming upon us immediately, that there were cases where if we had had more time we should have had better preparation. Every department, however, I believe, did the best it could and deserves great credit or it.

Q. Then, if a report came to you from outside the Army as to failure in any department, you made inquiry?

A. Yes, sir; if the matter was of any importance.

Q. If the report came through the regular channels of the department, you would only know of that as the head of the department communicated it?

A. Yes, sir; but I think they brought it to me, generally, in all cases where they could not correct it themselves.

Q. Did you have complaints as to the Medical and Quartermaster's departments?

A. There were some complaints; I can not specify now.

Q. In general, just what?

A. They were principally from outside the Army.

Q. Were those complaints, when they seemed to have foundation and to be such as required attention—were they invariably attended to?

A. Always, at the first possible moment.

Q. So far as you know, was the remedy applied in each instance so far as the funds available and the condition of affairs in the country admitted?

A. I do not think, sir, we were ever short of funds; but we could not perform miracles. But just as rapidly as any deficiency could be supplied it was done, and every possible effort made by the departments and myself to correct them.

Q. Did you ever have any special complaints as to the food furnished the Army from the Army itself?

A. I do not think so. We heard the reports of some shortage at Santiago during the campaign, on account of not getting supplies ashore. There was an abundance of them aboard the ships. But that was remedied as rapidly as could be, and I believe any old soldier would say that they did well under the circumstances.

Q. Upon the examination of complaints that came to you from the outside, did you find the head of any bureau of the War Department guilty of such neglect as required at your hands any special complaint or censure?

A. Not at all, sir; not in a single instance.

Q. Was the head of any department or bureau of your Department guilty of neglect or failure to discharge his duty, so far as you know, during the continuance of the war?

A. No, sir.

Q. Did any complaint or report come to you at any time, General, of any irregularity or of any fraudulent practices in the contracts for supplies furnished to the Government in any of its departments?

A. Not one, sir.

Q. Excuse me for being a little personal: Did you directly or indirectly have any interest, a personal moneyed interest, I mean, in the selection of any of the camps occupied by any of the troops anywhere in the United States?

A. No, sir; I never had a dollar's interest in the vicinity of any camp. I do not know that I, or any person connected with me, has had a dollar's interest in any State where any camp was located; certainly not in the last ten years.

Q. You may not know it, but we have been investigating circumstances of that kind, and the best way is to go to headquarters.

A. That is right, sir; it is not altogether new to me; some of the things I read in the papers until I stopped reading them.

Q. Did you have any interest, direct or indirect, or in any way, in any contract entered into by any one of the departments for materials furnished to the Army during the war?

A. Not a cent in any contract or materials.

Q. Does that reply apply to transports purchased by the Government?

A. Yes, absolutely. Every expenditure of every dollar or every cent that was made by the Government was made upon matters in or upon which I had no interest, either directly or indirectly.

Q. General, Dr. Conner would like to know whether or not the Surgeon-General made application for funds out of the emergency fund prior to the time at which his report shows the funds from that emergency fund were allotted to him. Have you any recollection on that subject?

A. The several department heads came to my office pending the excitement after the emergency fund became available, and before the declaration of war, to know if they should do anything, as I remember, with reference to getting ready for the war if it should come. As a result of these conferences there was allotted, previous to April 21, 1898, to the Ordnance Bureau, \$5,551,967.95 (and on that day an additional sum of \$3,819,780); to the Engineer Department, \$4,347,000; to the Quartermaster's Department, \$1,500,000; Signal Office, \$241,400; Medical Department, \$20,000; Light-House Board, \$75,000; Paymaster's Department, \$55,000. The greater portion of this sum was, of course, allotted to the departments in

charge of the coast defenses, i. e., Engineer and Ordnance, in accordance with the plan which has been carried on year after year by the Government; and we bent every effort that was possible to increase those defenses and get as many additional guns and as many mines in place as we could, and as quickly as possible, for any emergency that might arise.

Q. No purchases were made then or no contracts entered into looking toward the equipment of the Army prior to the declaration of war?

A. No, sir; except that when diplomatic relations with Spain began to assume a threatening character, orders were given to push work with all possible energy, and to mount every available gun as fast as delivered. Operations were carried on with double, in some cases three, shifts of workmen, and were pushed regardless of weather and climate. In anticipation of appropriations for the purpose of purchasing ammunition, measures were taken to procure a large supply. The powder and projectile manufacturers came to Washington and arranged to greatly increase their plants. As early as February the manufacturers were given orders to work on smokeless powder to their full capacity, for all calibers from small guns to seacoast guns. In addition to this, however, as before stated, \$1,500,000 was allotted to the Quartermaster's Department; \$241,400 to the Signal Corps, and \$20,000 to the Medical Corps, but every energy was bent toward the protection of the coast.

Q. Have you any knowledge, General, of any complaint made by the Major-General Commanding the Army while in command at Porto Rico, or since, of the quality of the refrigerated beef furnished the army in Porto Rico, or of the canned roast beef furnished the Army?

A. In my annual report there is a dispatch that General Miles sent, requesting that no more beef be sent to Porto Rico, because they could get a full supply there; and in that I think he said something about the beef that had spoiled there. That is all I know of it.

General McCook. That was a dispatch of August 2.

Q. Had you any other information than that contained in that dispatch?

A. No, sir.

Q. I do not know to just what extent we are permitted to enter into the inside councils of the Government, so do not answer this question if in your judgment it is not proper to do so. You said a moment ago that no actual preparation was made in the way of purchase of supplies or entering into a contract for furnishing supplies or equipping the Army prior to the declaration of war. Was it the belief of those on the inside, in Government circles, that war would be averted?

A. I can not say, but I know it was hoped war would be averted.

Q. Did you, at any time in the preliminary stages of preparation for war, have the heads of the different bureaus assemble for consultation and advice as to the manner in which the war would be conducted, with a view to the coordination of the different departments, and hearty cooperation among them?

A. I do not remember, sir, that all of the heads of the bureaus were ever assembled for that purpose. The consultation of those that were interested—for instance, the Commissary, the Quartermaster, the Chief of Ordnance, and the Chief of Engineers—those which related to the carrying out of orders given to one by the other, was very frequent. I do not think a whole council was called there; but we were in such a flood of work all the time that each one would bring his budget and get his orders. I was trying to make them fit as far as possible. I do not think there was any friction; if so, I never heard of it.

Q. If I understand, the Quartermaster's Department and the Commissary Department, who interlace in their departments the duties of their departments—for instance, the Commissary Department would furnish supplies and the Quartermaster's Department would furnish the transportation for those supplies—they might come together?

A. Yes, sir.

Q. And it was the same also with the Medical Department and the Ordnance Department?

A. Yes, sir; and the Engineer Department.

General BEAVER. I have no desire to take the Secretary of War over the details we have covered with the different heads of the different departments or bureaus, Mr. President; and I do not know but that covers what I had in my mind.

Captain HOWELL. I have some questions.

By General BEAVER (resuming):

Q. The testimony before us seems to indicate that the Inspector-General's Department, as such, was not abolished, but that its efficiency was greatly impaired by the appointment of the head of it and several of the important members of it to positions in command. Was there special reason for that?

A. For appointing those men?

Q. For practically abolishing the Inspector-General's Department?

A. No, sir; it was supposed there was sufficient force left to carry on the work.

Q. Governor Woodbury suggests a question which may be a little delicate, and you may refuse to answer it if you see fit. Was the Inspector-General appointed to command at his own request or at the request of the Department?

A. It was not at the request of the Department.

By General DODGE:

Q. Is this the dispatch you referred to [handing it to witness]?

A. This is the dispatch I referred to, dated Ponce, August 2, 1898. from General Miles:

"Please inform me how soon ample quartermaster and commissary funds will be available at this place. We are using native transportation and employing labor in unloading transports and storing supplies. Abundance of beef, cattle, coffee, sugar, and supplies of that character can be obtained in the country. Request that no more fresh beef be sent, as it can not be used more than a day from the coast. I also recommend that the manufacture of Springfield rifles, .45-caliber ammunition, all white-canvas tentage, and black-leather equipments of every description be discontinued, as they are obsolete and should not be a part of the army equipment."

That is the dispatch.

By General BEAVER:

Q. Followed by your reply?

A. Yes, sir.

By Captain HOWELL:

Q. I move that the Secretary read that reply and make it part of his testimony.

A. If you wish it, sir.

Q. Yes, sir.

A. "Washington, August 3, 1898.—As you ought to know, the last caliber .45 Springfield rifle was manufactured in 1893. Smokeless-powder cartridges are now being manufactured and will be forwarded. I suggest that you get along with what the Government has on hand. The question of currency and duties will be taken up to-day. Your action requiring all duties to be paid in United States currency is approved and will be adhered to."

That is signed by me, R. A. Alger, Secretary of War. The matter of purchasing supplies of fresh meat was considered entirely in the hands of the Major-General Commanding, as he had ample funds there, and to a greater or less extent, as I remember, it was acquiesced in. When he asked for funds there was \$400,000 available at that time. He seems not to have known it.

Q. In Porto Rico?

A. Yes, sir. I think that is a matter of testimony that has been brought out here.

Q. I think so. I think one of the commissaries spoke about it. The chief commissary spoke of having a considerable amount.

By General DODGE:

Q. Mr. Secretary, did every commander in the field in command of troops have full authority to provide any supplies or any clothing or anything that that army required in an emergency?

A. I do not remember, General Dodge, whether such a general order was issued. I think no request was ever made that was not granted specifically.

By General BEAVER:

Q. General, do you know—I am requested to ask this—why the Inspector-General, after his appointment, was sent to Santiago? After his appointment of major-general—

Captain HOWELL. Before his appointment.

A. No, sir; he was appointed major-general before leaving Washington. He was, by the request of the Major-General Commanding, appointed chief inspector on his staff. He then afterwards asked for a command, and was assigned to the command of the First Division, First Army Corps, Major-General Brooke commanding, and he afterwards appeared at Port Tampa; just how I can not tell you now, as I have not the orders here. He probably had orders from the Major-General Commanding, and he either requested or was assigned by the Major-General Commanding to go to Santiago with General Shafter's command. He ranked General Shafter, but he went there with the understanding that he was not to exercise his rank. Whether it was his wish, as I understood it was, or the wish of the Major-General Commanding to go and represent him as an inspector, I could not tell you.

Q. What steps were taken by you to have the various camps throughout the country inspected during the time that there was sickness and prevailing distress and unrest in the country?

A. The early part of the season there was very little complaint; it culminated in summer, and there was a commission sent out to inspect the camps and their condition, and make such recommendations as they saw fit, and that, together with the reports of the general officers commanding, was the basis upon which changes were made. The War Department relied upon the officers commanding the camps for their proper care. Every officer that commanded a camp, a corps, or any large command was a Regular Army officer or graduate of West Point, who was supposedly posted and understood the rules of sanitation. Besides that, the Surgeon-General at the commencement sent out specific instructions, by my order, to all the camps for proper sanitation and care of the camps; but very much of the complaint that we acted upon came from outside the camps.

Q. What action was taken in pursuance of the complaints which came from outside and independently of the commanders of the several camps?

A. They were asked for reports immediately. For instance, at Tampa—the first information that came to the Department that there was a serious condition of affairs there in the health of the men came from an outside report by a person who telegraphed to the Department. General Coppinger, commanding, was immediately telegraphed to, and his report, which he said he would make out in a day or two, came, and it was so alarming that we broke that camp up at once. So with Chickamauga. In April, when the Regular Army was mobilized there, I think there were 6,000 men; in May, about 42,000; in June, the maximum of 56,000; and in July back to 42,000, and in August 12,000. Those, as I remember, are the figures. As soon as we had serious reports about that camp orders were given to change, and we selected Anniston, Lexington, and Knoxville as places they were to be sent to.

Q. Did you at any time send a special commission or board of inspectors to visit and report upon the several camps?

A. The first week in August a board was sent to Camp Alger, Camp George H. Thomas, Fort McPherson, and Fort Monroe to make a thorough investigation of the administration of the general and field hospitals located at those places.

Q. Of whom did that board consist?

A. Major Reed, surgeon, United States Army, and Major Hopkins. Their reports were acted upon. The first week in June a board consisting of Colonel Greenleaf, Assistant Surgeon-General, Major Hodgson, Major Hopkins, and Lieutenant Jadwin was directed to proceed to Columbia, Charleston, Savannah, Miami, and other points, with a view to ascertaining suitable camp grounds.

Q. By whose orders, General, did the large assemblage of troops come together, particularly at Camp Thomas?

A. I should say, sir, by the orders of the War Department. The gathering of troops there from the different States was when it was supposed, from all the information we could get, that there was almost unlimited space for them, best location, centrally located, with good water and ample ground, and it was thought that they could be conveniently cared for. Whatever may have been the congestion, I do not want to shift its responsibility upon any person; it was recommended to me by the Major-General Commanding and other officers as being a most excellent place for a large camp.

Q. And you acted upon that recommendation and continued to so believe until the reports of the distress there came to you?

A. Yes, sir.

By General DODGE:

Q. Mr. Secretary, did you have any conversation with or issue any orders to the Major-General Commanding the Army about inspecting the camps and their condition?

A. Yes, sir; one order. I think on the 26th of May. It is in my report.

Q. What reports were made in response to that order?

A. By the Major-General Commanding?

Q. Yes, sir.

A. He brought the order back to my Department, and said he was in the habit of issuing those himself.

Q. Was any action taken by him in relation to that order?

A. No, sir.

Q. Any inspection made?

A. No, sir.

Q. None whatever?

A. Not to my knowledge. He has never inspected a camp to my knowledge. He went to Tampa and was there fourteen days at the time of the embarkation of General Shafter's command, but I do not know whether he inspected a camp or not.

By Captain HOWELL:

Q. I want that order copied in the testimony. You say that is the order you gave at that time?

A. Yes, sir.

General BEAVER. I will read it.

“WASHINGTON, May 26, 1898.

“Major-General NELSON A. MILES,

“Commanding U. S. Army, Washington, D. C.

“SIR: You will proceed to the following points to make a thorough inspection of the troops there in camp: Chickamauga, Ga., Tampa, Fla., and Mobile, Ala. You

will be accompanied by the officers of your personal staff. On the completion of this duty you will return to the city and make report of the inspection herein ordered.

"I have the honor to be, very respectfully,

"R. A. ALGER, *Secretary of War.*"

The WITNESS. I wish to say that General Miles left by special train, I think the last day of May. He arrived at Tampa the morning of the 1st day of June and remained there until he was ordered back after General Shafter's expedition had sailed. I can not say what inspection he made while there.

By General BEAVER:

Q. No report of it was made?

A. No report of it was made; no, sir.

Q. I have asked you, General, in regard to any information received by you from the Major-General Commanding the Army in regard to the beef in Porto Rico, and you have replied and referred us to the dispatch which we have read. Did you have official complaints of any kind from any of the armies in the field, or the camps, as to the fresh meat or the canned roast beef furnished to the troops?

A. No, sir.

Q. Have you had any information, any special information, as to any complaint that the fresh meat furnished the troops was chemically treated?

A. Only through the testimony here and published statements.

Q. I suppose what would come through us would be official in a sense. Did you know, or had you knowledge of any other kind prior to the time when the question was raised before this commission as to any suspicion that that sort of thing was taking place?

A. I never heard of such a thing, sir.

Q. Do you know how long the canned roast beef has been in use in the Army?

A. My impression is that it was made a part of the army ration in about 1888 or 1889.

Q. Captain Howell wishes me to ask directly whether or not this canned roast beef was used during the war as an experiment?

A. Not at all. It was part of the ration.

Q. And had been for a number of years?

A. Yes, sir; eight or ten years.

By General DODGE:

Q. Are there any complaints coming from the present camps and the troops in relation to the canned roast beef and the refrigerated beef?

A. None whatever. A letter received yesterday by the Commissary-General from the commissary at San Juan, Porto Rico, said that they were now issuing refrigerated beef to the troops and they were delighted with it, by which I judge they had been using fresh beef from the island.

By General BEAVER:

Q. So far as you know were any complaints received from any other command than the one at Porto Rico?

A. Not so far as I know.

By General DODGE:

Q. The charge has been made—it is personal and I will ask you the question—that you are interested in some of the refrigerating processes of meat or canned meat. Have you any interest directly or indirectly in any of them?

A. I have not. I never had directly or indirectly a cent's interest in any process or property, or anything that has been supplied to this Government from the beginning until now. I could not even supply them with lumber from Michigan.

By Governor WOODBURY:

Q. General Alger, I notice you did not send any statements as to requisitions upon the emergency fund by the Commissary-General. Did he make any such requisitions?

A. No, sir. The regular fund supplied the Army, and he would have none other to supply until the volunteers were called into the field.

Q. And food products could be obtained upon the market at any time?

A. Yes, sir. We did nothing at all but get all the information we could, and get as ready as possible for war without expending money or making contracts for commissary supplies until war was declared.

Q. But you did commence after this fund became available, and war was possible, to make inquiries around the country for the various things that might be wanted in case of war?

A. Yes, sir; and as I said hurried along the work on the coast defense.

Q. It appears in the testimony of Mr. Baldwin, president of the Long Island Railroad, that on the 2d of June he had an interview with General Frank. I think he went with General Frank and Colonel Gilliss—I think it was June 2—to Montauk Point and discussed with Mr. Baldwin the desire of the Government to obtain that place to bring the troops back from Santiago, which then were about to move from that point. He was at that time department commander. We did not interrogate General Frank on that subject when he was before us, as we did not have the knowledge at that time. Please state whether or not you had any knowledge of General Frank's going to Montauk Point at that time?

A. I will furnish all orders and correspondence relating to that matter, and make it a part of my testimony.

(Hereto attached, marked "Exhibit G.")

By Captain HOWELL:

Q. That camp was selected by a board of army officers?

A. Yes, sir.

Q. Do you know the board?

A. I know the Surgeon-General was one. Did you send one, General Wilson?

General WILSON. No, sir.

By Dr. CONNER:

Q. Has, at any time, a request for an allotment of money been denied by you or the money refused?

A. No, sir; at no time.

By Governor WOODBURY:

Q. I would like to ask, Mr. Secretary, if you depend upon the heads of bureaus very largely or entirely to make known to you the needs of their several departments?

A. Very largely; yes, sir. Of course, very many requests and orders come to the Adjutant-General that are immediately sent to the Secretary of War.

Q. My object was to obtain from you the information whether or not the initiation of the needs of the several departments came from the heads of bureaus—if you depended upon them.

A. I would say in answer to that, that immediately a camp was to be located or transportation was required for it, that the chiefs of bureaus were immediately communicated with and told that there were so many troops there or to be sent there, and they were called upon at once to prepare for the same.

Q. Please state whether or not the Medical Department, being more of a scientific department than the others, was depended upon more fully to suggest its needs than the other departments?

A. Necessarily so; except the constant reminder by me that ample quantity must be supplied.

Q. Please state whether or not you instructed in specific or general terms the Surgeon-General to supply all the needs of the troops in the field.

A. Very many times, sir.

By Captain HOWELL:

Q. Did you ever receive any intimation or information that the food furnished by the Commissary Department during the war caused the sickness of the soldiers?

A. No, sir.

Q. From any source?

A. No, sir; except reports of your commission.

By Governor WOODBURY:

Q. Did you receive any reports from Chickamauga or Camp Thomas during its existence that there was a great lack of medicines and medical supplies there?

A. Yes, sir. We had those reports during the early part of the encampment.

Q. From whom did you receive them?

A. From visiting people who went there, and from newspapers, and from requisitions made by the commanding officers; all of which were at once supplied, or as quickly as possible.

Q. Did you receive any reports or notifications from the Surgeon-General that he was unable to supply the proper amount of medicines or medical stores to the troops at Camp Alger?

A. No, sir.

Q. Did you receive any report from his officers and from several commanding officers at the camps or corps, or the chief medical officers of the camps or corps that there was a marked deficiency in medicines and medical supplies at Camp Thomas and the men were suffering on account of that?

A. Whenever a report or an order came to the Adjutant-General or direct to me, the Surgeon-General was directed by me to inquire into and fill those orders at once.

Q. Please state whether or not when these charges came to your notice you immediately took vigorous steps to supply the deficiency.

A. Without a moment's delay.

Q. Mr. Secretary, I would like to ask whether or not the condition of the Fifth Corps which arrived at Montauk excited any anxiety in your mind, and what particular measures of relief were adopted by your Department?

A. Montauk was selected because it was believed to be a very healthful place; because we had great fear of yellow fever; because there we could regulate our own quarantine and our own hospitals, and because we could keep people away from there in case there was any danger. It was believed from the reports that we received that there was what was necessary for them—a good and healthful camp.

Q. That answers as far as the camp was concerned. Now, what particular measures were taken by the Department to relieve the pitiable condition of those men after they arrived from Cuba?

A. There were two hospitals established, one called the detention and the other the general hospital.

Q. We understand that, General.

A. The measure of what was furnished when they first came there, as to the needs, I can only say that I think we were short. We sent a great number of tents and supplies of every kind; but it took a little time to get them up, and for a few days I think the place was congested, and not as much or as many comforts

furnished the men as I believed we had provided for. Every effort was made, however. Large forces were employed and sent there, and in a very short time the hospital, as reported by those who saw it, was good. I went there and became satisfied that the diet of the men should be changed, and I gave orders that milk and vegetables of all kinds and delicacies that could be used should be furnished in unlimited quantity. I ordered 2,000 gallons of fresh milk to be sent there every day from that day on; and eggs, butter, and milk and everything that could be used was also sent. A great deal was sent by the Red Cross and other societies, still the Government authorized the purchase of all of them, but in going into camp, while I do not believe there was any considerable suffering, yet there was not the comfort at first that there was later.

Q. Please state whether or not, Mr. Secretary, you had any assistance toward the restoration of those men there in the way of supplies.

A. Yes; the Red Cross and many individuals furnished much, and I ordered everything that we had any knowledge or belief or imagination that we thought they would need.

Q. I wish you would fix the date of this visit and send it over.

A. Yes, sir; I will. August 24, 1898.

By Captain HOWELL:

Q. The sickness in those troops from Santiago was greater than you expected?

A. Yes, sir; much greater.

Q. You had no idea they would be so bad?

A. No, sir.

Q. You had no reports to that effect?

A. No reports showing the general debility of the men. I was surprised to see the condition of them.

By General DODGE:

Q. Mr. Secretary, have you any statement you desire to make of your own?

A. No, sir.

Q. Or any information we have not called out?

A. None I think of.

Q. If you have anything or think of anything, you can send it in and have it added to your testimony.

A. I wish to add that from conversations had with many officers and all I have asked concerning the matter, both from Santiago and Porto Rico, that I do not believe any meats, unless thoroughly salt cured or dried, if exposed in that tropical climate during the season that our troops were in those islands, can be preserved longer than a day, or two days at most, whether in cans or exposed to the air. Much of the meat, at Santiago especially, was taken ashore and piled upon the beach, exposed to the hot sun, and transportation being necessarily irregular on account of the condition of the roads it was necessarily more or less injured by such exposure, and I have no doubt in many cases became spoiled by such exposure, although in good condition when it left the refrigerator on the ship. I am also reliably informed that fresh meat will spoil in those islands during a single day after killing unless it is cooked.

EXHIBIT A.—January 26, 1899.—J. C. M.

WAR DEPARTMENT,
SURGEON-GENERAL'S OFFICE,
Washington, January 20, 1899.

MEMORANDUM.

Up to the time that war was declared it was not practicable to take any immediate steps to obtain supplies, as it was not known until that date that the troops would actually be called out, nor were there funds available from which to make purchases. But already, before April 1, in view of the possibility of future needs, orders were given to have the field medical outfits, medical and surgical chests, instruments, etc., at the supply depots put in order for issue in case of need, and early in March the preparation of new pattern medical and surgical chests was begun, so as to have them ready for manufacture should the necessity arise.

The question as to whether medical supplies should be ordered in anticipation of war was submitted by the Surgeon-General of the Army to the honorable the Secretary of War on two occasions—date not now remembered. The Secretary decided that it would not be justifiable to order medical supplies until war should be actually declared, especially as such supplies could be readily obtained on short notice from wholesale dealers in our large cities.

Immediately upon the declaration of war, April 21, steps were taken to obtain medical supplies for the new Volunteer Army. For the more important articles, and those of highest cost, bids were invited at short notice, such, for instance, as medical and surgical chests, litters and slings, field operating cases, pocket cases, orderly and hospital corps pouches, etc. Orders were given and the manufacture expedited with the utmost dispatch. Requests for proposals for the usual spring purchases had been made in March, but to obtain medicines and other additional supplies, in view of a state of war, advantage was taken of the authority granted by act of Congress and purchases were made in open market, the interests of the Government being guarded by obtaining informal bids when the amount was large and time permitted.

On May 3, foreseeing that it would be impossible to have ready for issue to the volunteer regiments, as soon as they were mustered in, the medical and surgical chests above referred to, as well as other articles of field equipment, although their preparation was pushed with the utmost dispatch, I telegraphed the governors of the several States for authority to utilize the medical equipment of the National Guard in the service of the State volunteers until our army medical supplies were ready for issue.

Most of the governors of the States who had field equipment responded promptly and satisfactorily, but, unfortunately, many of the State medical departments had no such equipment. These deficiencies were supplied by the issue of the advance field regimental outfits referred to in my annual report for 1898. Most of the State field medical equipment so loaned has been or probably will be, eventually, paid for by the United States.

At the request of the Surgeon-General, commanding officers of regular regiments ordered to take the field were directed to take from their posts the full field equipment and three months' medical supplies.

The officers in charge of the medical supply depots in New York and St. Louis were directed to make arrangements so that supplies could be immediately obtained for 100,000 men for six months.

New forms of surgical dressings, especially designed for field use, composed of sterilized, sublimated, and iodoform gauze, sterilized gauze bandages, absorbent cotton, catgut and silk, sterilized and packed in convenient envelopes; tow, compressed cotton sponges, and plaster of paris bandages were also prepared under the immediate supervision of this office. Samples of these were sent to

the three supply depots, New York, St. Louis, and San Francisco, and all issues directed to be in conformity therewith. Forty boxes of these specially prepared dressings were put up at the temporary supply depot, Army Medical Museum, Washington, D. C., and sent to Tampa, Fla., for the use of the army about to sail for Cuba.

To provide temporarily for volunteer regiments organized and ordered to camps before the new medical and surgical chests were ready for issue, supplies of medicines, instruments, hospital stores, stationery, and miscellaneous articles, according to a prescribed list and packed in convenient boxes, were prepared at the supply depots.

Whenever notice was received from the Adjutant-General's Office that commands were to be moved or camps formed, I endeavored to anticipate the wants of the troops by telegraphing the officer in charge of the nearest supply depot to forward supplies for the stated number of men according to the field supply table.

Requests from medical officers for supplies and orders, based thereon, transmitted to the supply depots, were largely by telegraph, and orders were given that when the supplies were needed promptly they should be forwarded by express to their destination. When a medical officer desired to purchase medical and other supplies for use in emergencies authority to do so was always granted.

GEO. M. STERNBERG,
Surgeon-General U. S. Army.

WAR DEPARTMENT,
OFFICE OF THE ADJUTANT-GENERAL.

MEMORANDUM FOR THE SURGEON-GENERAL UNITED STATES ARMY.

The Secretary of War desires a brief memorandum of the disposition made of the \$1,520,000 allotted to your bureau from the special emergency appropriation for national defense, under the War Department, and date of expenditure.

H. C. CORBIN, *Adjutant-General.*

JANUARY 19, 1899.

Disbursements by the Medical Department of the Army on account of the appropriation "national defense" (war) made by the act of Congress approved March 9, 1898.

Dr. To allotments of—		Cr.	Balance in hands of disbursing officers.
1898.			
Apr. 16	\$20,000.00	By amount disbursed by Lieut. Col. Ch. Smart, deputy surgeon-general.....	\$19,989.29 \$10.71
Sept. 8	500,000.00	By amount disbursed—	
		By Lieut. Col. Ch. Smart, deputy surgeon-gen- eral, to Dec. 31.....	149,999.65 .35
		By Lieut. Col. J. M. Brown, deputy surgeon- general, to Dec. 31.....	134,999.31 .60
		By Col. J. P. Wright, assistant surgeon-general, to Dec. 31.....	150,000.00
		By Lieut. Col. J. V. D. Middleton, deputy sur- geon-general, to Dec. 15.....	40,000.00
		By Maj. J. E. Pilcher, brigade surgeon, U. S. Volunteers, to Nov. 30.....	4,972.56 27.44
		By Maj. R. E. Giffen, chief surgeon, U. S. Vol- unteers.....	6,264.66
		By Lieut. F. M. Hartsock, assistant surgeon, U. S. Army, to Dec. 10.....	2,570.56 7,429.44
		By accounts forwarded to Auditor for War Depart- ment for audit and settlement.....	2,913.28
		Total disbursements.....	491,720.02 7,457.92
		By balances in hands of disbursing officers.....	7,457.92
		By balance in Treasury.....	822.06
			500,000.00

EXHIBIT B—January 26, 1899.—J. C. M.

WAR DEPARTMENT, PAYMASTER-GENERAL'S OFFICE,
Washington, January 20, 1899.

MEMORANDUM FOR GEN. H. C. CORBIN, ADJUTANT-GENERAL UNITED STATES ARMY.

The total amount of the special emergency fund allotted to Pay Department was \$255,000
 For disbursement as follows:
 For pay of contract surgeons \$5,000
 For mileage to officers 250,000
 Total 255,000

The entire allotment for contract surgeons has been expended. There is at the present time a small balance in hands of paymasters for payment of mileage due December 31, 1898. The exact amount is not obtainable, as it is in the hands of several paymasters. The entire amount will be exhausted during the present month.

A. B. CAREY,
Acting Paymaster-General, United States Army.

EXHIBIT C, January 26, 1899.—J. C. M.

WAR DEPARTMENT,
OFFICE OF THE ADJUTANT-GENERAL.

MEMORANDUM FOR CHIEF SIGNAL OFFICER.

The Secretary of War desires a brief memorandum of the disposition made of the \$238,900 allotted to your Bureau from the special emergency appropriation for national defense under the War Department, and date of expenditure.

H. C. CORBIN, *Adjutant-General.*

JANUARY 19, 1899.

WAR DEPARTMENT, SIGNAL OFFICE,
Washington, January 20, 1899.
ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C.

SIR: In accordance with memorandum of January 19, 1899, I have the honor to report that the following disposition was made of the \$238,900 allotted the Signal Corps from the special emergency appropriation for national defense, under the War Department:

For maintenance, operation, and rental of cables	\$126,605.47
Telegraph and telephone lines, instruments, batteries, and supplies ..	37,596.18
Heliographs, kites, lanterns, and other visual signaling	5,513.25
Field glasses and telescopes	10,111.25
War balloons, and expenses in connection therewith	17,710.67
Electrical installation at posts of fire-control system, etc	22,443.51
Miscellaneous (company outfits, stationery, furniture, photographic material, etc.)	5,099.42
Total expenditures	225,079.75
Transferred to officers for use in Cuba, Porto Rico, and the Philippines ..	8,016.00
Cash on hand December 31, 1898	5,804.25
Grand total	238,900.00

3776 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

The expenditures shown above were made between March 25 and December 31, 1898, and the exact date can be given for any specific item, if required.

Yours, respectfully,

A. W. GREELY,
Brigadier-General, Chief Signal Officer of Army.

EXHIBIT D—January 26, 1899.—J. C. M.

WAR DEPARTMENT,
OFFICE OF THE ADJUTANT-GENERAL.

MEMORANDUM FOR THE CHIEF OF ORDNANCE UNITED STATES ARMY.

The Secretary of War desires a brief memorandum of the disposition made of the \$9,081,496.86 allotted to your Bureau from the special emergency appropriation for national defense under the War Department, and date of expenditure.

H. C. CORBIN, *Adjutant-General.*

JANUARY 19, 1899.

Memorandum of expenditures by the Ordnance Department, United States Army, from funds allotted from the \$50,000,000 for national defense.

EXPENDED.

Date.	For—	Amount.
1898.		
Mar 16 to July 9.....	Ammunition, projectiles, fuses, and powder for field guns.....	\$205,756.60
Mar 28 to June 22.....	Equipments—artillery, cavalry, and infantry.....	580,000.00
Apr. 16 to July 26.....	Small-arm cartridges.....	237,000.00
Mar. 22.....	Telescopic sights for seacoast guns.....	21,000.00
Do.....	Lewis range finders.....	190,900.00
Mar. 16 to Aug. 9.....	Powder and explosives for filling seacoast projectiles.....	352,236.35
Mar. 16 to Apr. 30.....	8, 10, and 12 inch seacoast gun carriages.....	1,373,405.00
Mar. 22 to Dec. 28.....	Projectiles for seacoast guns and mortars.....	1,653,000.00
Mar. 29 to Sept. 30.....	Powder for seacoast guns and mortars.....	560,250.00
Mar. 26 to July 28.....	Fuses, primers, and cartridge bags.....	121,000.00
Apr. 15.....	Quadrants for mortars.....	4,000.00
Mar. 16 to June 28.....	Armor and deck plates for testing projectiles.....	37,597.10
Mar. 17.....	Armament chests for seacoast ordnance.....	20,000.00
Mar. 18 to Mar. 31.....	4.7-inch rapid-fire guns, with mounts and ammunition.....	588,700.00
May 3 to June 6.....	Instruments, etc., for seacoast batteries.....	10,000.00
Mar. 23 to July 19.....	Implements and equipments for operation and care and preservation of seacoast ordnance.....	37,365.13
Mar. 23 to May 31.....	Machinery for manufacturing war material at arsenals.....	44,000.00
Mar. 31.....	Purchase of seacoast guns.....	120,000.00
Apr. 8.....	6-inch rapid-fire guns, with mounts, ammunition, etc.....	240,000.00
Apr. 9 to Dec. 15.....	Test of Gatham's system of high-explosive projectiles.....	20,000.00
Apr. 2 to June 14.....	Services of temporary clerks.....	5,400.00
Apr. 19 to Aug. 20.....	Ammunition, powder, projectiles, fuses, etc.....	215,402.90
Mar. 29 to Aug. 4.....	Brackets for telescopic sights.....	7,000.00
Apr. 19 to May 31.....	Sights for field guns.....	3,300.00
Apr. 18.....	4-inch rapid-fire guns, with mounts, complete.....	30,000.00
June 22 to Sept. 21.....	Instruments for tests of powder.....	2,500.00
Apr. 15.....	6-pounder and 15-pounder rapid-fire guns, with mounts and ammunition.....	740,000.00
Apr. 30 to Nov. 30.....	3.2-inch field cannons, with their carriages, equipments, sights, and harness, complete.....	387,750.00
Apr. 25 to Aug. 29.....	5-inch and 6-inch rapid-fire guns, with their mounts, etc.....	532,929.00
Apr. 23.....	Storage magazines for high explosives at Sandy Hook proving ground, New Jersey.....	6,000.00
Apr. 26.....	5-inch and 6-inch Brown segmental wire rapid-fire guns, with mounts, complete.....	506,000.00
Apr. 25.....	Alteration, maintenance, etc., of the pneumatic dynamite-gun battery at Fort Hancock, N. J.....	23,500.00
Apr. 25 to July 25.....	Purchase and manufacture of ordnance stores to fill requisitions of troops.....	66,504.73
Dec. 13.....	Total.....	8,951,496.86
	Reported to Secretary of War as available for reallocation.....	130,000.00
	Grand total.....	9,081,496.86

EXHIBIT E—January 26, 1899.—J. C. M.

OFFICE OF THE CHIEF OF ENGINEERS,
UNITED STATES ARMY,
Washington, January 20, 1899.Brig. Gen. H. C. CORBIN,
Adjutant-General United States Army.

GENERAL: In compliance with memorandum instructions of the Secretary of War, dated January 19, 1899, I have the honor to submit the following brief memorandum of the disposition made of the \$5,585,000 allotted to the Engineer Department from the emergency appropriation for national defense, act of March 9, 1898.

The dates, purposes, and amounts of the different Presidential allotments, with subsequent withdrawals, are shown in the table following:

Allotments.

1898.		
Mar. 17.	For emplacements for fourteen 12-inch, eighteen 10-inch, twenty 8-inch guns, and for rapid-fire guns.....	\$2,725,000
	For torpedo defense, including search lights, cable tanks, cables, mines, junction boxes, switches, dynamos, etc.....	250,000
Mar. 31.	For emplacements for fourteen 4.72-inch rapid-fire guns at specified points.....	90,000
	For emergency purposes, preparing for temporary defenses at exposed points, and for torpedo service.....	60,000
Apr. 2.	For temporary batteries for old and new guns at specified points and for contingencies for further emergencies.....	150,000
	For torpedo defenses of the country.....	1,150,000
Apr. 16.	For temporary batteries and installing and making serviceable old armament at specified points.....	65,000
Apr. 21.	For planting torpedoes.....	150,000
	For emplacements for eight 6-inch rapid-fire guns at specified points.....	50,000
Apr. 23.	For emplacements for seventeen 12-inch and twenty-one 8-inch B. L. rifles on barbette mounts.....	932,000
	For cleaning ditches and moat of Fort Delaware, Del.....	6,000
May 28.	For supplies for engineer depot at Manila.....	35,000
	Allotted to officer in charge of public buildings and grounds for departmental telegraph service.....	7,000
		5,670,000
May 4.	Withdrawn by Secretary of War.....	\$10,000
Sept. 24.	Withdrawn by Secretary of War.....	75,000
		85,000

Total accounted for 5,585,000

A summary of the expenditures is given in the table below:

For permanent batteries.....	\$3,841,574.99
For temporary batteries.....	168,896.76
For submarine mine defense.....	1,397,949.46
For ditches and moat, Fort Delaware.....	6,000.00
For engineer depot at Manila.....	35,000.00
For purchase of engineer equipment.....	13,824.95
For departmental telegraph service.....	7,000.00
Balance unallotted, for battery construction.....	3,019.90
Balance unallotted, for submarine mine defense.....	111,733.94

Total accounted for 5,585,000.00

The funds allotted for construction of gun and mortar batteries have been applied to the erection of permanent emplacements for thirty-one 12-inch guns, eighteen 10-inch guns, forty-one 8-inch guns, and forty-six rapid-fire guns at twenty-six different harbors. These emplacements have been completed in all essential details and much of the armament installed for service.

In addition to the above permanent batteries temporary defenses were erected at twenty-five different harbors involving the mounting of seventy-nine old-type seacoast and modern siege guns, strengthening parapets and magazines of existing old-type batteries, cleaning and overhauling existing old-type armament, and sundry minor emergency work.

The funds allotted for torpedo defenses have been applied to the purchase of a vast amount of material, including over 400 miles of cable, over 100 tons of explosives, 1,650 new mine cases, 44 search lights, etc., and to planting and maintaining over 1,500 mines at twenty-five different harbors.

As most of the operations of the Engineer Department under the allotments from the appropriation for national defense consisted in work carried on by hired labor under the supervision of numerous district officers, the expenditures have been continuous from the date of the first allotment to the present time, and it will not be practicable from the data in this office to furnish exact dates for all expenditures.

Detailed statements of the expenditures from the allotments for gun and mortar batteries and for submarine mine defenses are attached hereto. These detailed statements should not be published, as they would furnish valuable information to other Governments.

Very respectfully, your obedient servant,

JOHN M. WILSON,
Brigadier-General, Chief of Engineers, U. S. Army.

Statement of allotments for battery construction from appropriation for national defense, act of March 9, 1898.

PERMANENT BATTERIES, INCLUDING EMPLACEMENTS FOR 8-INCH B. L. RIFLES ON 15-INCH S. B. CARRIAGES.

Locality.	Work.	Allotment.	Remarks.
Kennebec River, Me.....	One 8-inch on S. B. C.....	\$5,000.00	Gun mounted.
Portland, Me.....	Six 8-inch.....	240,691.00	Platforms ready.
	One 6-inch R. F.....	7,200.00	Gun mounted.
Portsmouth, N. H.....	Two 8-inch on S. B. C.....	1,000.00	Do.
Boston, Mass.....	Three 12-inch dis.....	166,680.00	Platforms ready.
	Two 12-inch nondis.....	80,000.00	Do.
	Two 10-inch dis.....	114,000.00	Do.
	Two 4.72-inch R. F.....	14,740.00	Guns mounted.
	Two 4-inch R. F.....	9,090.00	Do.
New Bedford, Mass.....	Two 8-inch dis.....	103,500.00	Platforms ready.
Narragansett Bay, R. I.....	Two 12-inch nondis.....	103,708.44	Do.
	Two 10-inch dis.....	92,620.00	Guns mounted.
	One 8-inch on S. B. C.....		Gun mounted by troops on platform already constructed.
	One 6-inch R. F.....	8,250.00	Gun mounted.
	Two 4.72-inch R. F.....	17,000.00	Do.
Eastern entrance to Long Island Sound.	Two 10-inch dis.....	103,000.00	Do.
	Two 8-inch on S. B. C.....	77,100.00	Platforms ready.
	One 4.72-inch R. F.....	9,000.00	Gun mounted.
New York, N. Y.....	Four 12-inch dis.....	182,000.00	Platforms ready.
	Two 12-inch nondis.....	80,000.00	Do.
	Three 10-inch dis.....	95,000.00	Do.
	Three 8-inch on S. B. C.....	2,081.77	Guns mounted.
	Two 6-inch R. F.....	7,000.00	Platforms ready.
	Four 4.72-inch R. F.....	7,653.44	Guns mounted.
Philadelphia, Pa.....	Two 12-inch nondis.....	80,000.00	Platforms ready.
	Two 8-inch dis.....	68,000.00	Guns mounted.
	Two 4.72-inch R. F.....	19,750.00	Do.

Statement of allotments for battery construction from appropriation for national defense, act of March 9, 1898—Continued.

PERMANENT BATTERIES, INCLUDING EMPLACEMENTS FOR 8-INCH B. L. RIFLES ON 15-INCH S. B. CARRIAGES—Continued.

Locality.	Work.	Allotment.	Remarks.
Baltimore, Md.....	Two 12-inch dis.....	\$113,500.00	Platforms ready.
	Two 12-inch nondis.....	80,000.00	Do.
	Two 4.72-inch R. F.....	10,616.08	Guns mounted.
Washington, D. C.....	Two 10-inch dis.....	93,450.00	Platforms ready.
	Two 4-inch R. F.....	13,000.00	Guns mounted.
Hampton Roads, Va.....	Three 10-inch dis.....	116,000.00	Platforms ready.
	Four 4.72-inch R. F.....	2,955.63	Guns mounted.
Wilmington, N. C.....	Two 12-inch nondis.....	126,500.00	Platforms ready.
	One 8-inch dis.....	40,000.00	Gun mounted.
	One 4.72-inch R. F.....	6,000.00	Do.
Charleston, S. C.....	One 12-inch dis.....	97,200.00	Platform ready.
	One 12-inch nondis.....		
	One 6-inch R. F.....	15,500.00	Do.
	Two 4.72-inch R. F.....	6,000.00	Guns mounted.
Port Royal, S. C.....	Two 10-inch dis.....	89,000.00	Platforms ready.
	Two 8-inch on S. B. C.....	9,748.41	Guns mounted.
	Two 4.72-inch R. F.....	6,000.00	Do.
Savannah, Ga.....	Two 12-inch nondis.....	120,453.72	Platforms ready.
	One 6-inch R. F.....	14,356.68	Gun mounted.
	Two 4.72-inch R. F.....	10,429.87	Do.
Fernandina, Fla.....	One 8-inch on S. B. C.....	7,064.28	Do.
St. Johns River Fla.....	Two 8-inch on S. B. C.....	32,500.00	Do.
Key West, Fla.....	Two 12-inch nondis.....	85,000.00	Platforms ready.
	Two 4.72-inch R. F.....	18,000.00	Guns mounted.
Tampa, Fla.....	Two 8-inch on S. B. C.....	33,500.00	Platforms ready.
	Two 6-inch R. F.....	34,600.00	Do.
Pensacola, Fla.....	Two 12-inch dis.....	127,420.00	Do.
	Two 8-inch dis.....	110,000.00	Do.
	Two 4.72-inch R. F.....	8,523.09	Guns mounted.
Mobile, Ala.....	Two 12-inch disappearing.....	158,000.00	Platforms ready.
	Two 8-inch on S. B. C.....	20,000.00	Do.
	Two 4.72-inch r. f.....	15,000.00	Guns mounted.
New Orleans, La.....	Two 8-inch disappearing.....	150,000.00	Do.
	Two 8-inch on S. B. C.....	10,000.00	Platforms ready.
	Two 4.72-inch r. f.....	7,000.00	Guns mounted.
Sabine Pass, Tex.....	One 8-inch on S. B. C.....	5,932.58	Do.
Galveston, Tex.....	Two 10-inch disappearing.....	110,000.00	Platforms ready.
	Two 8-inch disappearing.....	110,260.00	Do.
	Two 4.72-inch r. f.....	41,000.00	Do.
San Francisco, Cal.....	Three 8-inch nondisappearing.....	91,000.00	Do.
Balance unallotted.....		3,019.90	
		3,844,594.89	

TOTAL NUMBER OF EMPLACEMENTS.

8-inch disappearing.	8-inch non-disappearing.	8-inch on 15-inch S. B. C.	10-inch disappearing.	12-inch disappearing.	12-inch nondisappearing.	R. F. guns.		
						6-inch.	4.72-inch.	4-inch.
17	3	21	18	14	17	8	34	4

TEMPORARY BATTERIES AND EMERGENCY WORK.

Locality.	Work.	Allotment.	Remarks.
Bar Harbor, Me.....	Two 10-inch S. B.....	\$7,000.00	Guns mounted.
	Two 8-inch C. R.....		
Kennebec River, Maine.....	Four 15-inch S. B. platforms.....	4,400.00	Do.
Portland, Me.....	Mounting two 8-inch C. R.....	3,000.00	Do.
Boston, Mass.....	Temporary range finding service communications.	4,800.00	Work discontinued.
New Bedford, Mass.....	Platforms for two 8-inch C. R.....	199.63	
East entrance to Long Island Sound.....	Installing search lights, Plum and Great Gull islands.	1,500.00	Work completed.
Stonington.....	One 10-inch S. B.....	24,000.00	Guns mounted.
New London.....	Five 8-inch S. B.....		
New Haven.....	Six 10-inch S. B.....		
Bridgeport.....	Four 10-inch S. B.....		
New York, N. Y.....	Three 8-inch C. R.....	4,184.83	Battery completed.

3780 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

Statement of allotments for battery construction from appropriation for national defense, act of March 9, 1898—Continued.

TEMPORARY BATTERIES AND EMERGENCY WORK—Continued.

Locality.	Work.	Allotment.	Remarks.
New York, N. Y.....	Protection for dynamite battery, Sandy Hook, and range-finder station at same.	\$12,200.00	Work completed.
	Parapet for 8-inch C. R. and 15-inch S. B.	2,497.00	Do.
Washington, D. C.....	Parapet and platform for 10-inch B. L. R., nondisappearing, 1892.	1,750.00	Gun mounted.
	Emergency work, clearing field of fire, etc.	1,975.00	Work completed.
Hampton Roads, Va.....	Platforms for four 8-inch B. L. R., nondisappearing, 1892.	3,220.42	Guns mounted.
	Reinforcing magazines of water battery.	300.00	Work completed.
Beaufort, N. C.....	Cleaning and installing two 10-inch S. B. and two 100-pounder Parrotts.	2,958.35	Guns mounted.
Georgetown, S. C.....	Two 5-inch siege guns.....	5,000.00	{12-pounder bronze guns mounted.
	Two 7-inch siege howitzers.....		
Port Royal, S. C.....	One 5-inch siege gun.....	2,000.00	Do.
	One 7-inch siege howitzer.....		
Savannah, Ga.....	Platform for 8-inch B. L. R., nondisappearing, 1892.	2,763.63	Gun mounted.
	Repairing platforms of two 15-inch S. B.	2,263.12	Do.
Darien, Ga.....	Two 5-inch siege guns.....	11,011.53	{12-pounder bronze guns mounted; Parrotts mounted.
	Two 7-inch siege howitzers.....		
Brunswick, Ga.....	Three 100-pounder Parrotts.....	9,098.07	{Guns mounted; 12-pounder bronze guns mounted.
	Three 10-inch S. B.....		
	Two 5-inch siege guns.....	2,999.11	Guns ready for service.
	Two 7-inch siege howitzers.....		
Fernandina, Fla.....	Installing and making serviceable old armament (four 15-inch S. B.)		
St. Johns River, Florida.....	Two 5-inch siege guns.....	13,200.00	{12-pounder bronze guns mounted.
	Two 7-inch siege howitzers.....		
St. Augustine, Fla.....	One 5-inch siege gun.....	11,882.40	{12-pounder bronze guns mounted; gun and mortar mounted.
	One 7-inch siege howitzer.....		
	One 8-inch C. R.....	13,110.00	{12-pounder bronze guns mounted.
	One 10-inch mortar.....		
Miami, Fla.....	One 5-inch siege gun.....	14,900.00	Guns mounted.
	One 7-inch siege howitzer.....		
Tampa, Fla.....	Two 5-inch siege guns.....	4,453.67	{12-pounder bronze guns mounted.
	Two 7-inch siege howitzers.....		
Sabine Pass, Tex.....	Two 5-inch siege guns.....	3,120.00	
	Two 7-inch siege howitzers.....		
Expenses, Office Chief of Engineers.	Wharf for landing materials.	50.00	
	Telegrams settled by Treasury Department.		
		168,896.76	

OFFICE OF THE CHIEF OF ENGINEERS UNITED STATES ARMY, *January 20, 1899.*

Statement of allotments for submarine mine defense from appropriation for national defense, act of March 9, 1898.

For purchase of about 1,600 submarine mines, 450 miles of cable, casemate operating apparatus, 45 search-light outfits, and minor miscellaneous articles..... \$1,069,085.43

For purchase of explosives and for planting and maintaining mine fields at the following harbors:

Penobscot River, Maine.....	3,200.00
Kennebec River, Maine.....	3,200.00
Portland, Me.....	13,000.00
Portsmouth, N. H.....	3,900.00
Boston, Mass.....	68,700.00
New Bedford, Mass.....	5,000.00
Narragansett Bay, Rhode Island.....	11,000.00
Stonington, Conn.....	3,000.00

For purchase of explosives and for planting and maintaining mine fields at the following harbors—Continued.

New London, Conn.....	\$5,500.00
New Haven, Conn.....	11,500.00
New York, N. Y.....	55,176.00
Philadelphia, Pa.....	4,500.00
Baltimore, Md.....	6,000.00
Washington, D. C.....	10,565.07
Hampton Roads, Va.....	17,000.00
Wilmington, N. C.....	10,450.00
Charleston, S. C.....	8,000.00
Port Royal, S. C.....	3,978.56
Savannah, Ga.....	5,000.00
Fernandina, Fla.....	1,500.00
St. Johns River, Florida.....	1,000.00
Key West, Fla.....	9,000.00
Tampa Bay, Florida.....	4.00
Pensacola, Fla.....	750.00
Mobile, Ala.....	2,384.38
New Orleans, La.....	13,666.23
Sabine Pass, Tex.....	2,000.00
Galveston, Tex.....	2,570.02
San Diego, Cal.....	369.77
San Francisco, Cal.....	37,000.00
Columbia River.....	8,000.00
Dynamite, etc., sent to Tampa for use in Cuba.....	1,950.00
Balance unallotted.....	111,733.94
	<hr/>
	1,509,683.40

OFFICE OF THE CHIEF OF ENGINEERS, UNITED STATES ARMY,

January 20, 1899.

EXHIBIT F.—JANUARY 26, 1899.—J. C. M.

WAR DEPARTMENT,

OFFICE OF THE ADJUTANT-GENERAL.

MEMORANDUM FOR THE QUARTERMASTER-GENERAL, UNITED STATES ARMY.

The Secretary of War desires a brief memorandum of the disposition made of the \$1,989,230.82 allotted to your bureau from the special emergency appropriation for national defense, under the War Department, and date of expenditure.

H. C. CORBIN, *Adjutant-General*.

JANUARY 19, 1899.

Memorandum of the expenditures made by the Quartermaster's Department from the allotment of the appropriation national defense (war), as shown by money accounts of officers received and examined in the Quartermaster-General's Office up to and including January 20, 1899.

Amount remitted to officers, accounts for the period April to December, 1898, inclusive.....

\$1,998,757.67

Forage, purchase of.....	41,807.84
Fuel, purchase of.....	7,647.47
Heating and cooking apparatus.....	1,115.14
Illuminating supplies.....	78.54
Stationery.....	793.14

3782 INVESTIGATION OF CONDUCT OF WAR WITH SPAIN.

Advertising and printing		\$185.61
Animals, shoeing of, and materials		727.70
Animals, care and stabling, and recovery of		1,050.76
Office and mess furniture, purchase and repair of		962.45
Interments of officers and soldiers		278.00
Telegraph and telephone service		252.71
Horses, purchase of (1,650)		102,543.00
Mules, purchase of (4,166)		426,267.40
Wagons, purchase of (104)		28,399.00
Harness, purchase of		6,769.30
Means of transportation, purchase and repairs of		34,005.14
Cavalry and artillery horses, purchase of (1,064)		155,350.33
Transportation of heavy guns:		
Railroad	\$2,587.55	
Water	4,044.01	
Wagon	59.18	
		6,690.74
Transportation of gun carriages:		
Railroad	5,280.99	
Water	2,861.22	
		8,142.21
Transportation of ordnance stores, etc.:		
Railroad	5,189.45	
Water	2,282.94	
Wagon	201.97	
		7,674.36
Transportation of field artillery:		
Railroad	580.52	
Water	433.53	
		1,014.05
Transportation of troops:		
Railroad	149,698.43	
Water	2,136.67	
Wagon and stage	1,510.51	
		153,345.61
Transportation of supplies:		
Railroad	36,979.22	
Water	2,443.50	
Wagon	2,341.71	
		41,764.43
Reimbursements of traveling expenses, etc		10,882.78
Roads, bridges, etc		12.00
Civilian employees, hire of		78,609.94
Storehouses, offices, quarters, stables, etc., hire and repair of		8,363.69
Grounds, hire of		2,546.66
Clothing and equipage, purchase, repair, etc		159,432.76
Vessels:		
Maintenance and repairs	\$135,165.62	
Charter of	8,225.25	
		143,390.87
Water supply and sewerage		18,337.59
Miscellaneous purchases and expenses		6,501.93
Expenditure for transportation of Spanish troops from Cuba		513,860.00
Total expenditures		1,968,803.15
Amount remaining in hands of officers	\$17,525.92	
Amount returned to Treasury by officers	12,428.60	
		29,954.52
Total remitted to officers from allotment and accounted for ..		1,998,757.67

WAR DEPARTMENT, QUARTERMASTER-GENERAL'S OFFICE,
Washington, January 19, 1899.

MEMORANDUM FOR THE HONORABLE THE SECRETARY OF WAR.

There is not on record in the files of this office any instructions as a rule in regard to arranging for or purchasing supplies before the war for any volunteer army to be called out, but I went many times before the declaration of war to consult with the Secretary or get his instructions in regard to taking preliminary steps to provide the various quartermaster's supplies, especially clothing and tentage, for the wants of such an army if called out. It is distinctly impressed upon my mind that, when war seemed imminent, in answer to my inquiries, renewed a number of times, as to what the probable strength would be of the troops which might be called out, he informed me that while he was not able to state the number, he considered that at least 30,000 would be called out, and that I should arrange for clothing supplies accordingly; this with the understanding that I had sufficient funds of that current year's appropriations to pay for such supplies, and that even if we had no war these supplies could be used by the existing Regular Army. I have verified this understanding on my part by consulting the chief clerk of the clothing branch (Colonel Gilliss, the officer in charge of clothing supplies at that time, having died recently), and by the record of purchases arranged for between March 25 and April 20, 1898, which purchases, together with the stock on hand of the principal items (such as blankets, blouses, campaign hats, summer drawers, leggings, ponchos, shoes, and stockings), would provide for a volunteer army of the size of 30,000. This was predicated upon the belief that the Regular Army had in its possession supplies for three months, which were the requirements of orders and regulations, and which it is believed were complied with. When war was declared I do not remember to have received any written instructions from the Secretary directing me to provide supplies, as regulations and orders prescribed the allowance of clothing to be furnished; that no orders were necessary in view of the fact that so many people were to be clad and sheltered, requiring a certain amount of clothing and tentage. Our best efforts were devoted to providing the necessary supply of clothing suited to the season of the year, and in the matter of tentage special efforts were made to provide, first, the allowance of shelter tents, it being considered that such equipment of tentage was that required for an actual campaign in the field; then followed, in addition, the equipment of the men with common tents. From time to time the Secretary inquired of me the progress being made in the lines indicated, or gave me instructions as he deemed advisable to meet demands.

Action taken to procure wagon transportation and pack mules in Quartermaster's Department, under instructions of the Secretary of War.

- Apr. 13. Commanding general, Department of Colorado, directed to ship to depot quartermaster, St. Louis, all aparejos and pack saddles on hand.
Colonel Smith directed to purchase 1,000 pack mules and 1,000 pack saddles.
Pack train ordered from Alaska.
- Apr. 16. Chief quartermasters departments directed to report number and kind of wagons, animals, etc., that will be shipped South with troops.
400 sets ambulance harness ordered, and 100 ambulances purchased.
- Apr. 18. Proposals sent to wagon builders asking for bids for construction and delivery of wagons.
- Apr. 20. Colonel Smith authorized to award contract for draft mules purchased and 23. on two days' notice.
- Apr. 23. Colonel Lee authorized to purchase 500 artillery horses; this followed on April 28 by authority to purchase cavalry horses.
Captain Aleshire directed to purchase 200 artillery horses.
- May 6. Jeffersonville depot authorized to purchase 2,000 S. S. harness, draft.
- May 17. 200 ambulances purchased.

To provide wagon transportation for the regular troops ordered East previous to the declaration of war, the commanding officers were ordered to take all that was in serviceable condition from the posts where they were stationed, and reports were received from chief quartermasters of departments of the amounts taken. Letters were written to leading wagon builders and harness makers, asking them to report their capacity for manufacture on short notice. All aparejos and pack saddles were ordered to St. Louis depot on April 13, and on same date Colonel Smith was directed to purchase 1,000 pack mules and 1,000 pack saddles.

To replenish stock ambulances, contracts were made as follows:

Mar. 25. Red Cross.

Apr. 16. For 400 sets ambulance harness and 100 Rucker ambulances.

May 17. For 100 Rucker ambulances.

Apr. 20. The purchase of draft mules was commenced by Colonel Smith at St. Louis.

Apr. 23. The purchase of artillery and cavalry horses authorized by Colonel Lee at Chickamauga, and Captain Aleshire.

Following the above, the latter part of April and early in May large purchases were authorized of wagons and harness. This material was delivered as rapidly as it could be made and forwarded to the camps of mobilization.

EXHIBIT G.

[Copy of telegram sent.]

ADJUTANT-GENERAL'S OFFICE,
Washington, May 29, 1898.

COMMANDING GENERAL DEPARTMENT EAST,
Governors Island, New York Harbor:

Having reference to previous correspondence on this subject, Secretary War desires your recommendation for suitable encampment for one or two army corps on Long Island Sound. There are complaints that the camp at Hempstead is unsuitable by reason of want of water and otherwise undesirable location. It is thought that north end of Long Island, in vicinity of Montauk, possesses features that far surpass Hempstead. This, however, is suggestion only. It is desired that camp be located where shipping facilities both by rail and water can be had. Immediate investigation and report desired.

By command of Major-General Miles:

H. C. CORBIN, *Adjutant-General.*

HEADQUARTERS DEPARTMENT OF THE EAST,
Governors Island, New York City, June 2, 1898.

The ADJUTANT-GENERAL UNITED STATES ARMY,
Washington, D. C.

SIR: Pursuant to telegraphic instructions from the War Department, I proceeded yesterday to Montauk, Long Island, accompanied by the chief quartermaster of this department, Colonel Gilliss, and made a careful examination of the grounds and other facilities there with a view to ascertaining the advantages offered by that locality for a large military camp.

The ground examined belongs to the Montauk Land Company, and embraces an area of about 5,000 acres, free from fences or other artificial obstructions, which the company is laying out in villa sites. The soil is a drift formation covered with a good sod, with extensive level or slightly inclined areas, interspersed

with ponds, ridges, and high hills. Abundant water can be supplied by driven wells to a depth of 15 or 20 feet, and the ponds and ocean beach provide excellent bathing facilities. The varied character of the ground affords good advantages for instruction in target practice, both for small arms and field artillery, and for elementary drill and field maneuvers. The ground is accessible both by rail and sea, with depth of water sufficient for the largest vessels. The railroad company will provide all necessary terminal facilities, but some addition to the wharf, as well as temporary structures for storerooms, will be necessary if a large and permanent camp is to be established here.

For such camp the site appears to be almost ideal, but for a smaller or temporary one the expense entailed would hardly be warranted. I inclose herewith the report of Colonel Gilliss, giving approximate estimates for such constructions as will be needed.

The eastern end of Long Island being beyond the fortifications protecting the entrance to the sound, a camp at this point would be exposed to bombardment by a naval force; but as the undulating character of the ground would afford protection from such fire, it is believed that this danger is not great.

Very respectfully, your obedient servant,

ROYAL T. FRANK,
Brigadier-General, U. S. Volunteers.

LONG ISLAND RAILROAD COMPANY,
New York, June 3, 1898.

General R. T. FRANK,
Governors Island, New York Harbor.

DEAR SIR: I have endeavored, in the limited time at my disposal since seeing you yesterday, to get together information on the various points which you wished covered so that I might let you have it without delay.

I met Colonel Gilliss this morning and reported to him on water supply, buildings, etc.

The lands at Montauk Point are not owned by the railroad, but by the Montauk Company, from which I have procured the requisite authority to lease the property to the military authorities, and I am able to submit to you the following proposition:

A lease will be made to the military authorities for any period up to June 1, 1899, for the sum of \$15,000, of all the lands of the Montauk Company on Montauk Point, Long Island, estimated at about 5,000 acres, including the whole of Lake Wyandane and one-half of Fort Pond, excepting the lands now occupied by buildings, the small properties now under lease, and the land lying south and west of the blue line on the map submitted herewith, a segment of the large map which you already have in your possession.

The Montauk Company is obliged to ask a rental for the property in view of the fact that this use of it by the Government will postpone its being placed upon the market for a year.

The lease to include also the present dock of the company on Fort Pond Bay, with the right to the Government, at its expense, to extend the same or to build other docks or wharves on any part of the property.

The property is to be used as a military camp or post under the jurisdiction of the military authorities of the United States.

The lands and shore front lying south and west of said blue lines are reserved by the company, but the military authorities are to have full jurisdiction thereover for the purposes of police, and also all convenient access over said reserved lands to and from the present or any future docks, and the further right to erect and to have access to all such buildings for storage or other purposes upon said reserved lands as they may see fit.

The lease not to be assigned; no portion of the leased property to be sublet or used for any purpose other than a military camp. The Government, however, to have the right to establish any trading or canteen privileges about the camp which it may desire, it being understood, however, that the Montauk Company shall have the right to license and regulate all trades, business, selling and offering for sale on the reserved property, subject to the approval of the commanding officer in charge, and that no intoxicating liquors shall be permitted to be sold upon any of said reserved lands. The military authorities to agree that there shall be no destruction of trees on the leased lands.

The Long Island Railroad Company will also agree to transport all military passengers to and from said camp at the rate of $1\frac{1}{2}$ cents per mile (our regular rate being 3 cents per mile), with a right to a minimum rate of 50 cents per passenger on all movements of troops. Freight transported to and from said camp to be carried at a discount of 25 per cent off the regular published tariff rates of the company. The railroad company will also supply at its own cost upon the reserved land all necessary track facilities at Montauk station, including additional sidings, for prompt handling of all Government business that may be furnished it, including free switching of cars to secure prompt loading and unloading.

This proposition to the Government is made upon the following condition, which I think reasonable and proper in view of the great concession in rates quoted and the large expenditures necessary to provide the facilities required, viz: The military authorities to agree that they will not contract with or employ any other carrier for transportation facilities between Montauk and New York or Long Island points, and that no vessel owned or controlled by private individuals or corporations shall be permitted to land at or use the present or any future docks for passengers or freight to or from New York or Long Island points without the permission of the railroad company, it being, however, understood that any Government transports or vessels may discharge and load troops or supplies at such docks, and that any vessels may there take or discharge passengers from or to other points than New York or Long Island, with the permission of the military authorities.

I beg to assure you on the part of the Montauk Company that it will be their aim to serve in every possible way the best interests of the Government, and cordially to aid and support the Government in establishing and maintaining a military camp at Montauk.

Very respectfully,

W. H. BALDWIN, Jr., *President.*

HEADQUARTERS DEPARTMENT OF THE EAST,

OFFICE OF CHIEF QUARTERMASTER,

Governors Island, New York Harbor, June 4, 1898.

THE ADJUTANT-GENERAL DEPARTMENT OF THE EAST,

Governors Island, New York Harbor.

SIR: Having accompanied the department commander to Montauk Point, Long Island, New York, on the 2d instant for the purpose indicated in Special Orders No. 118, current series, from your office, I have the honor to report that I have ascertained that the only considerable body of land in that vicinity entirely clear of incumbrances, available and suitable for camping two or more army corps and having rail and water communication, is owned by the Montauk Company, and consists of about 5,000 acres. This land can be hired for the sum of \$15,000 for the period of one year. This sum to be paid should the Government occupy it for any portion of said year. (See inclosures A and B.)

It is reached by the Long Island Railroad, which terminates at Fort Pond Bay, as shown on map herewith (marked B). The water in this bay is about 48 feet, extending nearly up to the shore where the railroad station is located. This company has a small wharf, very strongly built, which has 70 feet of frontage, with two railroad tracks and 26 feet depth of water at low tide at its water end. The average rise and fall of tide is 1.9 feet. To be available for large vessels the front of this dock must be extended at least 130 feet, and another approach, about 30 feet wide, provided for use of wagons. The cost of these extensions will be about \$16,000. This is the only good wharf on this bay. This, with the extensions, will only provide wharfage for one large vessel at a time. This bay is a deep, safe, and smooth anchorage for vessels of any size, except during a heavy blow from the north or northeast, as will be seen by reference to inclosure B. While the trackage now at Montauk station is limited, the railroad company offers to put in at their own expense all switches, etc., that are necessary. To supply a camp located on this property a wagon haul of from 1 to 2 miles will be required.

From inquiry I am led to think that there will be no difficulty whatever in obtaining an unlimited supply of fresh water of superior quality by sinking 6-inch pipes from 25 to 40 feet in the sand and gravel soil, and pumping it with a gas engine and pump of 3,500 gallons capacity per hour to tanks to be located on ground slightly higher than that selected for the camp or camps. There should be at least two of these pumps and two 30,000-gallon railroad tanks (in case of breakage) with necessary supply and distributing pipes, costing for the two, it is estimated, \$4,000. In case more than a corps is located, thus necessitating two large camps, the cost should be doubled.

At least two temporary storehouses, 30 by 100 feet each, costing about \$4,000 for the two, will be necessary, one for subsistence stores, the other for clothing and quartermaster stores and necessary offices. Forage during good weather can be kept under paulins, unless a large quantity is needed for mounted troops. Erection of shelter for this can be postponed during the dry summer season.

The expenditures before enumerated are absolutely necessary for a large permanent camp, excepting in the matter of wharf facilities. The absolute need for this I have no means of determining, or how much wharf front is necessary. There is ample room and deep water for building as many wharves as circumstances may require.

As this section is sparsely settled, there are but few, if any, teams to be hired in the vicinity, and a large Government train should be sent to this point as soon as it is decided to occupy it, for the purpose of hauling baggage of troops, stores, wood, etc. An abundance of dry cord wood can be purchased on the line of the railroad at reasonable prices. The tract is devoid of timber except a small scrubby growth in the hollows, which the owners value very highly and which must not be cut. Hay and grain must be sent from the western end of the island or New York City.

A recapitulation of necessary expenditures in connection with the occupation of this property is estimated as follows:

Rent of 5,000 acres of land	\$15,000.00
Extension of dock	16,000.00
Water supply	4,000.00
Two storehouses	4,000.00
Total	39,000.00

Very respectfully,

JAMES GILLISS,
Assistant Quartermaster-General, U. S. Army.

STATEMENT OF MAJ. GEN. WILLIAM LUDLOW.

OFFICE OF THE GOVERNOR OF HAVANA,
Havana, Cuba, January 21, 1899.

The WAR INVESTIGATION COMMISSION,
Lemon Building, Washington, D. C.

SIRS: I have been endeavoring to get time to prepare a statement for the information of the commission with reference to the representations attributed in the newspapers to General Miles, so far as those related to me or to my duties and responsibilities in connection with the Santiago campaign. Having only newspaper clippings which were sent to me by friends, I am without authentic information as to what General Miles really stated to the commission, and my time in Havana has been so engrossed that no opportunity has offered to draft this statement until now.

In the Evening Star, of Washington, I find the following:

"General BEAVER. Had the question of the disembarkation of the troops in Cuba been provided for before leaving Tampa?

"General MILES. General Shafter had not only his own staff officers, but I instructed General Ludlow to supply himself with everything necessary. I supposed at the time that he had done so, but when I reached Tampa I found he had not. He had a small number of pontoon boats that would be utterly useless for the purpose."

In the New York Evening Post I find the following under date of December 22:

"General Ludlow, the new military governor of Havana, according to General Miles, has to answer for the lack of any proper boats for disembarking the army on its arrival off Siboney, he having been sent to several places to collect a proper equipment."

If these indicate correctly the nature of General Miles's statements and of the responsibility which is therein made to attach to me for any shortcomings that may be supposed to have existed in connection with the embarkation and disembarkation of the Santiago expedition, I beg leave, disclaiming all intention of disrespect, to express surprise at the statements made.

I had the honor at the time to be attached to General Miles's staff, as chief engineer of the armies in the field, and such orders as I received were given me by him.

In the newspaper statements it is represented that I had been ordered by General Miles to supply myself with everything necessary for the disembarkation of the troops in Cuba, that I failed to comply with these instructions, and that practically I had done no more than furnish a number of small pontoon boats that would be entirely useless for the purpose, although I had been sent to various places for the purpose of collecting a proper equipment. Without further direct reference to these statements, which are without adequate basis of fact, but which, being newspaper renditions only, may be quite in error as compared with the official record, I beg leave to make the following statement of the actual facts of the case and of my responsibilities and duties for the information of the commission, to which I propose to append my affidavit as to their correctness, as has been, with one exception, the custom with statements made to the commission.

I have no records here with me in Havana and am therefore unable to furnish copies of the papers to which I may have to refer. My narration is from memory; the accuracy of which, however, can be readily verified by examination of the orders themselves.

I was first intrusted, orally, by General Miles, with the preparation of a project for the invasion of Cuba by an expeditionary force of five or six thousand men. This force was to make a surprise landing on the east shore of Mariel Bay,

immediately intrench and establish a fortified camp and depot as a base of operations, whence, with additional troops to follow, a campaign would be made against Havana. I prepared my draft of this and submitted it to the Major-General Commanding, with the particulars of the troops and their armament and the general details of the campaign to follow, involving an attack upon Havana from the southwest, first taking possession of the source of the water supply which lay in that direction.

This project having received preliminary approval, I made arrangements to get a battalion of engineers, in such numbers as might be practicable, with an outfit of intrenching tools and an advance division of pontoon boats to be used as a pier in Mariel Bay for the convenient landing of troops in sheltered waters, and in the absence of a wharf. The transport *Alamo* was landed at New York with two companies of engineers, one from Willets Point and one from West Point, with a pontoon train and a large quantity of tools, axes, picks, shovels, and the like, intended for the use of the engineer command. This, it will be observed, was for a campaign against Havana with an expedition landing five or six thousand men in Mariel Bay. Meanwhile the troops were gathering at Tampa, but the plan of campaign was suddenly changed and General Shafter's force diverted to an expedition against Santiago for the purpose of capturing or destroying the Spanish fleet and the garrison of the place. It will be observed that the problem was an entirely different one. Santiago had no inclosed harbor accessible to us and the landing must be made in one or more open roadsteads, comparatively insignificant indentations in the rocky shore line, with deep water close aboard. Meanwhile the *Alamo*, which had been loaded for another destination, was at sea, and later joined the expedition just as it was.

When the plan of campaign was ordered, I received a written order from General Miles, as nearly as I can recall, in the following terms: "To proceed to Tampa, accompany General Shafter's expedition to Cuba, and to render him all the assistance in my power." This was the only formal order I had from General Miles or anyone else.

It will be observed that I was not ordered to report to General Shafter, or apparently be subject to his instructions. Furthermore, that no reference whatever is made to any preparations for embarking or disembarking troops, or other specific duty of any kind.

I proceeded to Tampa, showed General Shafter my instructions, and found that in making his preparations for the campaign he had already charged the Quartermaster's Department with the entire arrangements for the embarkation and transportation to Cuba of the expeditionary force, as was entirely proper, the matter being one of transport and not of engineering. Colonel Humphrey was in charge, and was hiring transports, fitting them up for the transport of animals and men, engaging all the lighters, tugs, and other similar property that he could find, and there was nothing in that connection left for me to do. I therefore devoted my attention mainly to making as thorough a study as I could of the topography, the defenses, the roads, and other military particulars in and about Santiago, both on the east and west sides of the harbor.

With these exceptions:

First. I found that there were two deck scows unfinished on the stocks at Tampa which could be bought (they were engaged to the Navy, but the negotiations fell through), and I bought them. These lighters were taken with the expedition; one of them was lost at sea on the way, the other performed invaluable service in connection with disembarkation of the troops and freights at Daiquiri and Siboney.

Second. I made endeavor through the Quartermaster-General, using General Miles's authority, to procure steam launches for the transports, the utility of

which would be obvious in towing ship's boats and other small craft to and fro between the vessels and the landing. I made no endeavor to provide for the construction of wharves at Daiquiri or Siboney, where it had been determined that the landing should be made, for the reason that I was familiar with the circumstances of those two points, having thoroughly explored the situation in Washington, and later at Tampa. The difficulty of constructing a wharf in the local conditions existing, and the delay in doing so, made it quite impracticable to undertake such a task. The Quartermaster-General reported that steam launches could not be obtained after inquiry made at all the large centers.

Third. I took a census of the transport fleet and the number of ship's boats, and made an estimate of what might be the additional facilities by use of the navy boats, cutters, and cargo boats and the steam launches belonging to the blockading squadron. These data were carefully collated, and it was found that not less than 3,000 men could be put afloat from the ships at one time, and that the transports being held at a distance of a quarter or half a mile from shore it would be possible, under favorable conditions, to land the entire personnel in a day.

Fourth. I took occasion at Tampa to procure a considerable amount of additional lumber of convenient sizes, plank and timber, which I also had loaded into the *Alamo* for such uses as might later be made of it, with further additions to the tools and similar matters.

This practically concluded my relation to the subject of disembarkation, as all the points were covered as fully as the circumstances permitted. It was quite true that the provision could have been advantageously increased by the employment of more steam lighters if the quartermaster could have found them, but with this, it will be observed, I had nothing to do. I reported these facts personally to the Major-General Commanding, assured him of my conviction that there would be no difficulty, with average conditions of weather, in disembarking the expedition. With this statement he seemed to be satisfied. He then inquired what arrangements, if any, I had made with regard to the reembarkation of the expedition after the conclusion of the campaign. My reply to this was, "that as the disembarkation had to be made practically in the open sea, the men and freights floated ashore in boats, and the mules and horses mainly landed by discharging them through the side ports and swimming them to the beach, it was impracticable, without great difficulty and loss of time, to return them to the transports by a reversal of this process, and that in any case the theory of the expedition was that it should succeed in its object and capture Santiago Harbor, and it was taken for granted that we would have the inclosed waters of that bay, with the existing wharves and other facilities, for the reembarkation when that should be necessary."

A few days before the expedition sailed General Miles, who was at Tampa, informed me that I was not to go, but to remain and arrange for the fitting out of another and larger expedition, intended for Porto Rico, of some 30,000 men. I represented to the General, however, that all my arrangements had been made to go with General Shafter; that he wished me to go with him; was in a sense relying upon me for certain work that I might do to be useful to him, and that I would much prefer, if he would permit me, to carry out the original instruction. This was held under advisement for twenty-four hours, during which time I had made a draft of the engineer materials necessary for the larger expedition, had arranged for one or two engineer officers to come directly to Tampa and be assigned specially to that duty, and in other respects had made such provision as I could, leaving the other officers to amplify the matter if found necessary, as they would be entirely capable of doing. I also ordered by telegraph a large invoice of intrenching and other tools from the quartermaster and elsewhere, to

be shipped to Tampa without delay, arranged for the procuring of more pontoons and scows, and endeavored, in the brief time allotted me, to anticipate what might be the requirements of the Porto Rico expedition so far as the Engineer Department would be concerned. General Miles finally assented to my going with General Shafter, but after this decision had been made, and just prior to the departure from Tampa, I was much surprised to receive a formal letter from him, stating that I had been charged with the full responsibility for the embarkation, disembarkation, and reembarkation of the troops, and had been unrestricted in my orders and expenditures in connection with that object, and, in effect, that I would be held responsible in case the provisions should prove to be inadequate. As I had never received any such instructions, and as General Miles was present at Tampa and personally knew the circumstances of the expedition, and also knew that the transport and like arrangements were in the hands of the quartermaster, who, by the way, was on his own staff, who was in charge of the matter and not I, it seemed to me at the time that the letter was one which tended to place me in a false position, and was not in conformity with the facts of the case as known to exist. I made reply, disclaiming the full measure of responsibility attributed to me, reciting the facts with regard to the quartermaster's responsibility for the transporting, and expressing my assurance formally that the provision made, while it could be improved, would be practically adequate.

I sailed with General Shafter in his headquarter vessel, and upon reaching Daiquiri was first directed by him to land a portion of the engineer battalion with some intrenching tools for General Wheeler, and to order the repair of the small landing pier for boats which had been partly burned by the Spaniards. This was done by means of pontoons carried by the *Alamo*, and it is proper here to state that these pontoons were found extremely serviceable throughout the entire period, being almost constantly employed in the carrying to and fro between the transports and the shore, of men, material, and supplies. The boats are of wood, of orthodox dimensions and construction, and their strength and flat bottoms enabled them to land on the beach through the surf with less chance of injury than the keel boats were subject to under the same circumstances. The pontoons were also used, as I am informed, to carry sick and convalescents, supplies and medical stores to and fro. I doubt if in any campaign boats were more constantly and usefully employed than the pontoons of this division, although originally procured for the entirely different conditions at Mariel. General Shafter, by formal order of June 20, put the entire charge of the disembarkation of the forces in the hands of the quartermaster in conjunction with the Navy, and, as a matter of fact the Navy were practically in charge of the boat work, furnishing their own boats and launches and towing the boat loads of men to and fro with great expedition; the transport boats being, of course, used at the same time and for the same purpose. The expedition, so far as the personnel and most of the animals were concerned, was actually landed within forty-eight hours, after which the Navy took leave, carrying off with them their boats and steam launches, and leaving at the service of the quartermaster only the transports' boats and the limited number of lighters (two as I remember) at his disposal. It was at this time that the remaining one of the two scows which I had bought at Tampa was found invaluable in the landing of freights. I was not present, however, during most of this operation, General Shafter having directed me to go to Acerraderos, 18 or 20 miles west of Santiago Bay, taking a part of the engineer battalion with me and the remaining portion of the pontoon train, for the purpose of transferring General Garcia's army, estimated at about 3,000, from that point to a junction with General Shafter's troops at Siboney and Daiquiri. This was accomplished, though with the delay of a day by reason of the nonarrival of the three transports which were to be sent down to carry the Cuban troops. I had pontoon boats enough left in the *Alamo*

to construct a landing wharf in the bay at Acerraderos, an entirely sheltered one, but the twenty-four hours' delay made the use of the pontoons unnecessary, as I took occasion, with the use of the engineers and the employment of the Cubans, to construct a small landing wharf with trestles, which obviated the necessity for launching the pontoons and afterwards loading them again into the *Alamo*.

Upon my return, having General Garcia and his staff on board my own vessel, I reported the facts to General Shafter and made request of him that he assign me to a command at the front, since he had at his disposition his own corps engineer, Lieutenant-Colonel Derby, and in addition the eight engineer officers on duty with the two companies of the engineer battalion. He assented to this view and ordered me to the command of the First Brigade of the Second Division under General Lawton. I immediately proceeded, June 29, on this duty, and was thereafter in command of the brigade until subsequent to its return to the United States at Montauk. I may say in this connection, since the discharge of my engineering duties is made subject to public criticism by the Major-General Commanding, that they did not terminate with my departure from General Shafter's headquarters and the assumption of the command of my brigade. General Lawton, in fact, gave me the right of his line, and I was practically in charge under him of the investment of the city by intrenchments and emplacements of batteries for about three-fourths of the entire circuit of the city, namely, from San Juan Hill on the east around by the north and west to the head of the bay. This intrenching was continued between the dates of July 2, when my brigade took possession of the north end of San Juan Hill, to July 11, when it took the final position in the open meadow at the head of the bay and within three to six hundred yards of the Spanish trenches. The labor of the intrenching was done partly by the troops and partly by General Garcia's Cubans, who were practically placed under my orders for that purpose, and though nearly destitute of tools, labored constantly with pointed sticks for picks and their hands for shovels to assist in this essential work which, according to General Toral, of the Spanish army, made the surrender of his men in Santiago inevitable. My own brigade occupied four out of the six brigade positions that were successively held by the Second Division.

After my return to Montauk, I was in Washington and called at headquarters to pay my respects to the Major-General Commanding the Army. His first remark was, "I understand you did some very good fighting down there, but the engineering was very bad." I replied, "I think, General, when you know the facts you will find that, considering the circumstances, the engineering was as good as the fighting." He said, "You didn't build a wharf at which the transports could land. The railroad to Santiago was not repaired and put in service. The roads were not properly constructed in advance of the movement of the troops and no bridges were built over the streams." I replied in effect that these were mainly matters for General Shafter to direct, and, in fact, no such work was practicable. It would have taken a month or more to do all that, and the construction of the wharf in the open roadstead was quite impracticable any way. The campaign was a race between the physical vigor of the men and the Cuban malaria that lay in wait for them, and if General Shafter had waited to do all these things the Army would have been on its back before the surrender instead of after, and we should not have taken Santiago as we did.

If this paper should reach the commission too late for its formal sessions, I ask that it be incorporated as a part of its proceedings and report, and be given as much publicity as General Miles's statement received.

His statement, as reported, constitutes the first and only intimation known to me that I at any time or in any capacity neglected any duty or responsibility intrusted to me, and the construction put upon it by the public is of necessity one reflecting unfavorably and unwarrantably upon my public and official record.

I have therefore recited the facts as I recall them, having no doubts myself as to the substantial accuracy of my statement, which can be verified by the records, and now make affidavit of its verity in all essential particulars.

WILLIAM LUDLOW,
Lieutenant-Colonel of Engineers, U. S. Army,
Major-General Volunteers, U. S. Volunteers,
Military Governor of Havana, Commanding Military Dept. of Havana.

Sworn and subscribed before me this 22d day of January, 1899.

C. S. WALTON,
Major Volunteers, United States,
Judge-Advocate, Department of Havana.

HAVANA, CUBA.

HEADQUARTERS DEPARTMENT OF HAVANA,
January 30, 1899.

The WAR INVESTIGATING COMMISSION,

Lemon Building, Washington, D. C.

SIRS: Under date of January 21 I forwarded a statement for the information of the commission with regard to certain allegations made by General Miles to the commission, and quoting certain newspaper extracts which contained practically all the information I then had on the subject. I have since received a printed pamphlet purporting to be the complete statement by General Miles, and I find therein two or three additional points of quite minor importance, but to which, in order to make my statement to the commission complete, I desire to refer. I beg that my statement now made will, without further formality, be considered a portion of my previous testimony and covered by the same affidavit as to its verity. The portions of General Miles's statement to which I refer are the following:

Page 8—

“Q. Had the question of the disembarkation of the troops after reaching their destination been carefully considered by you and General Shafter?

“A. Yes, sir; he not only had his own staff officers to attend to that, but in addition to that General Ludlow was directed to provide himself with everything that was required. He went to West Point and Willets Point and obtained appliances for disembarking. They were placed on a steamer in New York, and I supposed at the time that they had all they required; in fact, I inquired of him if he had made every provision and he seemed to feel confident that he had, but when I got to Tampa I discovered that he had not. He had provided a certain number of boats—pontoon boats and small boats—that were utterly useless in the heavy surf. These boats would have been very good for putting a bridge across a pond, but the boats he took were not suitable to land stores in a heavy surf. I found there, however, two large barges which had been built for the Navy, and succeeded in getting the owner to let us have them. I gave directions to have them purchased, and they were sent with the expedition. There ought to have been a good many more, but those were the only ones obtainable at that time and place. They were sent with the expedition. One was lost at sea and the other was used to disembark the supplies at Siboney.”

And on page 9—

“A. Yes, sir. The expedition should have been furnished, independently of the Navy, with launches—naphtha or steam launches—or tugs for towing boats and barges from the ships to the shore. I relied largely upon the engineer officer and the Engineering Department to furnish that. In the second expedition (to

Porto Rico) those things were furnished, but they were kept and delayed at Santiago so that they never reached us until after the campaign was practically over."

In this I am represented as having gone "to West Point and Willets Point and obtained appliances for disembarking." The fact is, I never went to West Point or to Willets Point, having neither reason nor instructions to do so. The engineer companies were ordered from West Point and Willets Point to New York and instructed to bring with them all their field equipment of wooden pontoons, composing the advance division, and a large amount of other material and tools which might be useful in connection with the expedition to land at Mariel in order to inaugurate the campaign to Havana. I went to New York to attend to the loading of the engineer companies, the pontoon train, and other material into the transport *Alamo*, and did so. Everything went into the ship, and a good deal more than I had previously informed General Miles that I proposed to put in there. I urged upon the General the desirability of steam launches for the transports, and said that I proposed to get them if I could, but, as stated in my previous testimony, neither I nor the Quartermaster-General could find any, and the Navy had none to spare. The pontoon boats which General Miles states were not suitable to land stores in the heavy surf were constantly engaged in doing so during the Santiago campaign, both at Daiquiri and Siboney, and every officer connected directly or indirectly with the landing will undoubtedly make the same statement. Full testimony on this, however, can be obtained from the eight engineer officers in charge of the companies, as well as Colonel Derby, General Shafter's chief engineer. The value of these pontoon boats for making landings was so clear to the General that he insisted upon immediate arrangements being made for several others for use on the Porto Rico expedition. With reference to the two barges which I bought at Tampa, General Miles states that he found them there and succeeded in getting the owner to let him have them. I made the negotiations myself with the owner and purchased and paid for them myself. General Miles states that he relied upon me and the Engineer Department to furnish launches or tugs for towing boats. I have already stated that endeavor was made to get launches, which was a suggestion originating with me, and that I had nothing to do with the securing of tugs, which was in the hands of the Quartermaster's Department. I have no personal knowledge as to the details of the expedition to Porto Rico—whether the expedition was equipped with steam launches or not. My impression is that it was not. The landing of the Santiago expedition was accomplished, so far as the troops and animals were concerned, and a supply of rations for immediate requirements, within forty-eight hours after the disembarkation began, and could not have been more speedily accomplished had the landing been in a bay. I renew my assertion that during this embarkation and continuously thereafter there were no boats more useful or more constantly employed than the pontoon boats which General Miles declares were not suitable for the purpose. These statements are made under the same conditions as the preceding ones, and I desire to include them under the formality of the affidavit which was inclosed with the former testimony.

Your obedient servant,

WILLIAM LUDLOW,

Major-General, U. S. Volunteers, Commanding Department of Havana.

SUPPLEMENT TO STATEMENT OF GEN. NELSON A. MILES.

[Received February 3, 1899.]

HEADQUARTERS OF THE ARMY,
Washington, February 2, 1899.

Gen. GRENVILLE A. DODGE,

President War Investigation Commission, Washington, D. C.

SIR: In connection with the statement made to your commission, as published in the newspapers, by Maj. Gen. William Ludlow, U. S. Volunteers, I have the honor to submit the following for your information:

General Ludlow was assigned to duty at Headquarters of the Army by the following order:

SPECIAL ORDERS, }	HEADQUARTERS OF THE ARMY, ADJUTANT-GENERAL'S OFFICE, Washington, April 18, 1898.
No. 90.	

* * * * *

22. At the request of the Major-General Commanding the Army, the following-named officers are temporarily relieved from their present duties by the Secretary of War, and, by his direction, will report in person to the Major-General Commanding the Army for duty:

Lieut. Col. William Ludlow, Corps of Engineers.

* * * * *

The travel enjoined is necessary for the public service.

* * * * *

By command of Major-General Miles:

H. C. CORBIN, *Adjutant-General.*

It was not believed at the time that there could have been any mistake regarding the duties which General Ludlow was to perform, as he was an engineer officer. He received from time to time verbal and written instructions from me and was directed to proceed to New York to procure all appliances required. On the 29th of April, 1898, he was ordered to accompany Brigadier-General Shafter, who, at that time, was to command an expedition to the coast of Cuba. The following is the letter of instructions given him:

HEADQUARTERS OF THE ARMY,
Washington, April 29, 1898.

Col. WILLIAM LUDLOW,

Chief Engineer, Headquarters of the Army, Washington, D. C.

SIR: Major-General Commanding directs that you proceed from this city to Tampa, Fla., and accompany Brig. Gen. William R. Shafter's expedition and aid him in every way practicable. Upon the completion of this duty you will return to these headquarters. Travel is necessary for the public service.

Very respectfully,

J. C. GILMORE,
Assistant Adjutant-General.

A large sum of money (\$500,034), which had been appropriated by Congress to be expended under my direction, was placed at the disposal of General Ludlow, subject to my approval, and he was to provide all the appliances of an engineering nature necessary for the success of the expedition, also including debarkation, etc., of the troops.

When the developments of the war rendered it necessary to send a force to Santiago, General Ludlow, who was still with General Shafter, upon whom fell

the choice for this larger command, remained with it, and it was not supposed that the destination or the size of the command would in any way change the orders of General Ludlow to perform the duties originally assigned him with General Shafter.

On my arrival at Tampa I had several conversations with General Ludlow, and he received instructions from me at various times, and certain data collected by one of my staff officers from published works on the subject of expeditions beyond the sea was furnished him. In fact, the subject was well understood, and the question of the necessity of various supplies and arrangements, the methods of landing, etc., fully considered, and it was confidently believed he was attending to the same and understood such to be his duty. On my arrival at Tampa I found he had secured neither tugs, launches, lighters, nor barges. At the time, practically the only boats that General Ludlow had secured were the pontoon boats. The utter unsuitableness of these boats for a landing in an open sea, where there may be surf, is too well known to need further comment. Such boats were never intended for open-sea work, nor are the arrangements for the construction of bridges by means of them intended for other than closed harbors, or rivers, etc.

On June 11, 1898, the following letter was directed to General Ludlow, which it is believed he thoroughly understood, from verbal and other instructions received and his knowledge of the nature of the duties of an engineer officer:

HEADQUARTERS OF THE ARMY,

In the Field, Tampa, Fla., June 11, 1898.

Gen. WILLIAM LUDLOW, *Tampa, Fla.*

SIR: I am directed by the Major-General Commanding to inform you that your detail at Headquarters of the Army was in the capacity of chief engineer, and the duty to which you were assigned was to prepare the necessary appliances and force needed to disembark and reembark the command that was to move to the coast of Cuba. As you have not been restricted in this work it is expected that you have everything to successfully accomplish the duties required by your corps, and as the work is of such great importance you are expected to accompany the expedition, and under the direction of the commanding general of the expedition, superintend and direct the Engineer Corps to accomplish within the least possible time the disembarkation, and to render all necessary assistance to reembark the command.

Very respectfully,

F. MICHLER,

Assistant Adjutant-General.

A copy of General Ludlow's letter acknowledging the receipt of the above letter is appended hereto.

It was believed by his experience General Ludlow would be enabled to do much toward the safe arrangement of all that was necessary for the embarkation and the debarkation of the troops, including the construction of the necessary landings, for which timber, etc., was supposed to have been supplied by him, and generally by his supposed knowledge, etc., to so direct the necessary action or report the failure of same. It was not thought that this expedition would go away without the necessary lighters and barges, but these were not supplied; and it was not until I noticed two barges that were lying at Tampa, found out the owner, and directed personally their purchase by General Ludlow, that they were obtained. These are the barges that General Ludlow refers to as purchased by him. Nevertheless, the expedition did leave inadequately supplied.

It seems remarkable that General Ludlow should take it for granted that "suitable shore points" would be found, or that this expedition should have started without the necessary steam and other lighters, without which a safe and rapid

landing could not have been made. It is evident that the Navy was largely relied upon to land the troops, and it is due to them to say that it was practically through their generous assistance that it was accomplished. This army on shore, with its supplies on the sea, supplies to be landed by the inadequate means provided, was from day to day exposed to the danger of being cut off and left to disaster, for had a storm arisen, by no means improbable, the transports would have been forced to sea as well as the vessels of war, perhaps being unable to return for days.

The great importance of the presence of a trained and experienced engineer at the time not only of embarkation but of debarkation is manifest, and I freely confess it was a great disappointment to me to find that General Ludlow had left the duties for which he had been trained and for which he was fitted to others of less experience, in order to take the command of a brigade, and that he now pleads as an excuse the want of explicit instructions or that the duty was not engineering. Without going into the reasons for his assignment to a brigade, I should certainly have supposed, in view of the great importance of a trained engineer at that time, that his services would have been required for purely engineering purposes, for which he was trained in time of peace.

Many of the pontoon boats to which General Ludlow refers were wrecked on landing, and the débris of these boats was seen by me after my arrival there, July 11. In fact, their unsuitableness was remarked upon by the British naval attaché.

If it needed further demonstration of the inadequate and unsuitable appliances for debarkation, this would be shown by the slowness and difficulty with which supplies were landed and the shortage at times of rations. In fact, I found on my arrival that the commissary officer at Siboney was using every energy to land supplies fast enough for the troops with the only barge on hand, one having been cut loose or lost at sea, and only by the greatest effort were those furnished to the troops landed.

I request that this letter be made a part of the record of the proceedings of your commission.

Very respectfully,

NELSON A. MILES,
Major-General Commanding.

HEADQUARTERS OF THE ARMY,
In the field, Tampa, Fla., June 12, 1898.

Maj. Gen. NELSON A. MILES,

Commanding the Army of the United States, Tampa, Fla.

GENERAL: I beg to acknowledge the receipt of your letter of the 11th and to express my sincere appreciation of the confidence you have reposed in me, and which I shall endeavor and hope fully to justify. So far as the operations to be undertaken are concerned, I beg to assure you that all the engineer troops will use their utmost endeavor to accomplish any work that you may intrust to them, with the hope of meriting your approbation, and in particular will I do all in my power to fulfill the purpose in view and to carry out your instructions.

It will of course require the combined appliances of the Navy and of the transports to land the troops. The navy boats are strong and capacious, and in particular the steam launches are indispensable to prompt and effective work by towing the other boats with a load of troops and returning them. The united forces will be sufficient for this with favorable conditions; and it is reasonably computed that, including navy boats, ships' boats, and pontoons, 2,500 to 3,000 men can be floated at one time. It is of importance, however, to select a sheltered landing and take advantage of the moderate wave action prevalent in the

locality at this season. Landings of this kind can not be made through surf except by aid of special appliances procured in advance, and this only by a number of skilled surfmen, such as even the Navy can not supply.

The transports, with a few exceptions, are not designed for the carriage of animals, and they are greatly overloaded. The selections of vessels and the improvised interior arrangements are doubtless the best that could have been made at the time under the urgent orders of the War Department for preparation, but are necessarily defective in several important and vital particulars, such as adequate space, light, ventilation, convenience of access for feeding and watering, and the removal of sick or dead animals. The means of hoisting and loading also through hatches and side ports are for freight only in most cases. With all these particulars, which add greatly to the difficulty of handling, I have had nothing to do, and can assume neither credit nor responsibility; but it is to be hoped, as I know you have urged, that for like service in future ships intended for cattle ocean transport, where economical carriage has been reduced to a science, will be employed.

The destination and probable duration of the voyage is also an important consideration, as appliances which would answer for a trip of one or two days would be inadequate for a week.

Debarkation directly from vessels, always a tedious matter and liable to interruption from various contingencies, can not be conducted with advantage under fire or in rough weather. In the present case, however, the season is favorable, and there is reason to believe that suitable shore points will be found.

As to embarkation, a much more difficult affair in the open sea than debarkation, owing to the necessity for hoisting animals and stores, it is expected that the capture or sinking of the Spanish fleet will make the harbor available for loading, and adequate facilities, wharves, lighters, and the like exist there.

The point to which I had reference yesterday was that my assignment to your headquarters was as brigadier-general and not as engineer, and no public order has been made designating my specific duties. Your letter of instruction to me of April 29 is addressed to me as "chief engineer." If this were modified to read "Chief engineer of the forces in the field," the several volunteer corps engineers could then report to and receive instructions from your headquarters for the systematizing and unification of their work. Lieutenant-Colonel Black has been temporarily detailed and can act for me during my absence.

I beg to thank you, General, very heartily for the kindness and confidence you have shown me, and which I shall always recognize both as the highest official honor and a deep personal gratification.

Your obedient servant,

WILLIAM LUDLOW,
Brigadier-General and Chief Engineer.

A true copy:

J. B. MORTON,
Assistant Adjutant-General.

WASHINGTON, D. C., February 7, 1899.

TESTIMONY OF PROF. FRANK W. CLARKE—Recalled.

Prof. FRANK W. CLARKE, being duly sworn, testified as follows:

By General BEAVER:

Q. Professor, you have submitted reports of sundry analyses made under your direction of refrigerated and canned meats?

A. Yes, sir.

Q. Will you state, if you please, whether or not those reports contain correct analyses of what was done?

A. They contain a report of the work that I did personally.

Q. Then that covers the whole ground. They combined the results ascertained by actual chemical analyses made by you personally?

A. Yes, sir.

WASHINGTON, D. C., *February 7, 1899.*

TESTIMONY OF DR. W. D. BIGELOW.

Dr. W. D. BIGELOW, being duly sworn, testified as follows:

By General BEAVER:

Q. Please give us your full name and title, whether doctor of philosophy, or what?

A. W. D. Bigelow. I am a doctor of philosophy.

Q. Will you kindly give us your position at present?

A. Second assistant chemist in the Department of Agriculture.

Q. State, please, whether or not you have made analyses of certain specimens of refrigerated and canned beef sent to your Department by this commission.

A. I have.

Q. How were those analyses reported?

A. To the Secretary of Agriculture by Dr. Wiley, the chief chemist.

Q. Your reports of your work were made to Dr. Wiley?

A. Yes, sir.

Q. And communicated by him to the Secretary of Agriculture, who sent them to us?

A. Yes, sir.

Q. Have you seen the reports sent by Dr. Wiley?

A. Yes, sir; I examined the reports before they went out.

Q. Will you state, if you please, whether or not those reports contained the analyses made by you?

A. They did; yes, sir.

Q. And do they, or do they not, report correctly what was found in the analyses, and all that was found in the analyses?

A. Yes, sir; they are complete and correct.

Q. Did you make all the analyses yourself?

A. I did all the work, except the determining of the nitric acid and saltpeter. I could determine the presence of saltpeter, but not the amount. The other work I did.

Q. Then all the other work outside of the saltpeter you did personally?

A. Yes, sir.

Q. And the results as communicated by Dr. Wiley were in exact accordance with what was chemically demonstrated?

A. Yes, sir.

LETTER FROM JOHN S. PARKE.

PLATTSBURG BARRACKS, N. Y., *February 1, 1899.*

TO THE WAR INVESTIGATION COMMISSION,

Washington, D. C.

SIRS: I beg to be permitted to make one or two corrections in the testimony I gave at Burlington, Vt., before ex-Governor Woodbury, last September. I find that I said, in answer to a question, that we landed from the transport at Daiquiri

by means of the ship's boats, when, as a matter of fact, we landed by means of a lighter, the *Laura* by name, I now recollect. In regard to the supply of medicines, when in camp at Sevilla, between the 25th and 30th of June, I asked our surgeon for a dose of quinine, to use as a tonic after getting wet in a rain, and was told by him it was so scarce he could not give me any as a prophylactic. Afterwards I found some in my baggage and gave our regimental surgeon about a quarter of an ounce, which he was delighted to get, as it was so exceedingly scarce. That was about the 4th or 5th of July. With these corrections and additions to my testimony, I believe it to be correct, and would be pleased to have you incorporate it in your proceedings.

Yours, very respectfully,

JOHN S. PARKE,
Captain, Twenty-first Infantry.

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